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EXECUTIVE SUMMARY

Second largest cement market
• With cement production capacity of nearly 366 million tonnes, as of 2015, India was the second largest cement producer in the world. In 2016, country’s cement production capacity is expected to reach 395 million tonnes, which is expected to further increase to 550 million tonnes by 2025.

Dominated by private players
• Of the total capacity, 98 per cent lies with the private sector and the rest with public sector, with the top 20 companies accounting for around 70 per cent of the total production.

Higher share of large plants
• 210 large cement plants account for a cumulative installed capacity of over 350 million tonnes, while over 350 mini cement plants have an estimated production capacity of nearly 11.10 million tonnes, as of 2016.

Large concentration in South and West
• Of the total 210 large cement plants in India, 77 are situated in the states of Andhra Pradesh, Rajasthan and Tamil Nadu.

Source: Business Standard, Ministry of External Affairs, TechSci Research, Ministry of External Affairs (Investment and Technology Promotion Division)
CEMENT

Robust demand
- Robust infrastructure growth during 12th Five Year Plan to drive growth
- Demand is expected to be boosted by growth in real estate sector, initiative to build 100 smart cities to give a further stimulus

Increasing investments
- Robust investments are being made by the existing players to expand their capacity
- FDI inflow in industry related to manufacturing of Cement & Gypsum products reached USD3.11 billion, during April 2000 to September 2016
- Dalmia Bharat Group plans to spend USD293 million for increasing its production capacity in Odisha.

Long-term potential
- Oligopoly market, where large players have partial pricing control
- Low threat from substitutes
- Improvement in the sector is expected if government led projects gets translated into execution mode.

Attractive opportunities
- The North-East, which is witnessing a construction boom, offers attractive investment opportunities.
- The state cabinet has approved State Thermal Power Plant Ash Utilisation Policy, under which the government has invited cement companies, near power stations, to utilise the 1.8 crore ton ash produced, annually.

Notes: E – Estimated

Source: Ministry of External Affairs (Investment and Technology Promotion Division), DIPP, TechSci Research

2016E
Production capacity: 395 million tonnes

2025E
Production capacity: 550 million tonnes

For updated information, please visit www.ibef.org
CEMENT

OVERVIEW OF THE INDIAN CEMENT INDUSTRY

Cement industry (FY15)

Large cement plants
- Cement plants: 210
- Installed capacity: 378.3 mtpa
- Cement production: 270.3 mt\(^1\)

Mini and white cement plants
- Cement plants: 365
- Installed capacity: 11.7 mtpa
- Cement production: 33.66 mt

Source: Cement Manufacturers’ Association (CMA), TechSci Research
Notes: mtpa - Million Tonnes Per Annum, mt – Million Tonnes
\(^1\) Indicated (April 2014-March 2015)
India is the 2nd largest cement producer as well as consumer in the world led by the enormous growth in the infrastructure and construction sector for the last two decades.

As of August 2015, cement production in India accounted for around 6.7 per cent of overall global cement output.

**Top cement producers in FY16, (million tonnes)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>2483.18</td>
</tr>
<tr>
<td>India</td>
<td>285.83</td>
</tr>
<tr>
<td>USA</td>
<td>80.36</td>
</tr>
<tr>
<td>Iran</td>
<td>77.95</td>
</tr>
<tr>
<td>Indonesia</td>
<td>74.32</td>
</tr>
<tr>
<td>Brazil</td>
<td>72.57</td>
</tr>
<tr>
<td>Turkey</td>
<td>71.63</td>
</tr>
<tr>
<td>Russia</td>
<td>67.39</td>
</tr>
<tr>
<td>Vietnam</td>
<td>66.81</td>
</tr>
<tr>
<td>Japan</td>
<td>55.35</td>
</tr>
</tbody>
</table>

**Top cement consumers in FY16, (million tonnes)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Consumption (million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>2511</td>
</tr>
<tr>
<td>India</td>
<td>280</td>
</tr>
<tr>
<td>USA</td>
<td>93</td>
</tr>
<tr>
<td>Brazil</td>
<td>78</td>
</tr>
<tr>
<td>Russia</td>
<td>73</td>
</tr>
<tr>
<td>Spain</td>
<td>11</td>
</tr>
</tbody>
</table>


Note: FY16¹ – As on August 2015, India² – As of June 2015, USA – United States of America
As India’s current per capita consumption of cement (190 kg as of March 2015) is much lesser than the developed and other developing economies, there is a significant business opportunity to cater to the unmet and rising demand.

In order to meet the rising demand, cement companies are expected to pent up production by around 56 MT in the next three years.

Cement consumption growth by region YoY (%), 2015E

Cement intensity, As of 2014 ended (grams per USD of PPP GDP)

Source: International Cement Review, TechSci Research, Ministry of External Affairs (Investment and Technology Promotion Division)
Note: PPP – Purchase Power Parity
India¹ - As of March 2015; E-Estimated
CEMENT PRODUCTION IN INDIA HAS BEEN GROWING AT A FAST PACE

Production of cement (million tonnes)

Source: Department of Industrial Policy & Promotion, Office of the Economic Advisor, TechSci Research
Notes: E – Estimated

- Cement production increased at a CAGR of 6.44 per cent to 282.79 million tonnes over FY07–16
- As per the 12th Five Year Plan, production is expected to reach 407 million tonnes by FY17
- Availability of fly-ash (from thermal power plants) and use of advance technology has increased production of blended cement
- The environment-friendly blended cement is more cost-efficient to produce, as it requires lesser input of clinker and energy
- In August 2016, cement production in the country increased by 3.1 per cent in comparison to 1.4 per cent in July 2016

JANUARY 2017
DOMESTIC CEMENT CONSUMPTION IN INDIA ON AN UPTREND

* Domestic cement consumption is to reach 280 million tonnes in FY15 from 165.63 million tonnes in FY11

* The consumption is further expected to increase at a CAGR of 15.7 per cent during FY11-17 and reach 398 million tonnes

* Demand will be supported by infrastructure development in tier 2 and tier 3 cities

* The country’s per capita consumption is around 190 kg as of 2015, compared to the world average of over 350 kg per capita, which shows great potential for growth

* With the situation coming back to normal after demonetization, construction activities were seen to be picking up in the month of January. On the back of this, demand for cement is expected to see gradual improvement in the coming months.

**Official Cement Consumption Data**

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption (Million Tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY11</td>
<td>165.63</td>
</tr>
<tr>
<td>FY12</td>
<td>223.67</td>
</tr>
<tr>
<td>FY13</td>
<td>238.05</td>
</tr>
<tr>
<td>FY14</td>
<td>248.7</td>
</tr>
<tr>
<td>FY15</td>
<td>280</td>
</tr>
<tr>
<td>FY16E</td>
<td>359</td>
</tr>
<tr>
<td>FY17E</td>
<td>398</td>
</tr>
</tbody>
</table>

**Source:** CMA, CMIE Database, TechSci Research

**Notes:** E – Estimate, CAGR - Compound Annual Growth Rate
*Cement production capacity increased from 323 million tonnes in FY11 to 390 million tonnes in FY15

*Production capacity is expected to increase at a CAGR of 6.1 per cent during FY11-20E and reach 550 million tonnes

*Sagarmala Project, proposes development of fourteen Coastal Economic Zones (CEZ) across the major and non-major ports of India. The project aims to enhance cement production by 40 MTPA by 2025, and make domestic manufacturing more competitive.

Cement production capacity (million tonnes)

FY11 FY12 FY13 FY14 FY15 FY16E FY17E FY20E
323 336.1 349.6 366 390 395 479 550

Notes: E - Estimate, CAGR - Compound Annual Growth Rate
Cement capacity utilisation rate is expected to touch around 75 per cent in FY16E from 77 per cent in FY11

The capacity utilisation rate in FY15 was 73 per cent

Source: ACC Limited Corporate Presentation, TechSci Research
Notes: E - Estimate, CAGR - Compound Annual Growth Rate
¹ - Cement Capacity has been estimated for FY16
Currently, India has 210 large cement plants across states and is among the top ten exporters both by value and volume.

Andhra Pradesh is the leading state with 40 large cement plants, followed by Tamil Nadu and Rajasthan having 21 and 20 plants, respectively.

Major cement clusters include - Satna (Madhya Pradesh), Gulbarga (Karnataka), Yerranguntla (Andhra Pradesh), Nalgonda (Andhra Pradesh) and Chandoria (Rajasthan).

Source: Cement Manufacturer’s Association (CMA), TechSci Research
THE INDUSTRY IS SPLIT INTO FIVE GEOGRAPHIC SEGMENTS

<table>
<thead>
<tr>
<th>Cement industry</th>
<th>Installed capacity (FY15E)</th>
<th>Key markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>132.7 mtpa</td>
<td>Tamil Nadu, Andhra Pradesh and Karnataka</td>
</tr>
<tr>
<td>North</td>
<td>85.6 mtpa</td>
<td>Rajasthan, Punjab, Haryana and the NCR</td>
</tr>
<tr>
<td>East</td>
<td>49.4 mtpa</td>
<td>West Bengal, Chhattisgarh, Orissa and Jharkhand</td>
</tr>
<tr>
<td>West</td>
<td>57.6 mtpa</td>
<td>West Bengal, Chhattisgarh, Orissa and Jharkhand</td>
</tr>
<tr>
<td>Central</td>
<td>52.8 mtpa</td>
<td>Uttar Pradesh, Madhya Pradesh</td>
</tr>
</tbody>
</table>

Source: Indian Minerals Year Book by Indian Bureau of Mines, TechSci Research
Notes: mtpa - Million Tonnes Per Annum, E- Estimates

For updated information, please visit www.ibef.org
**NOTABLE TRENDS IN THE CEMENT INDUSTRY**

### Increasing presence of cement players
- Presence of small and mid-size cement players across regions is increasing, which helps to diminish market concentration of industry leaders
- A large number of foreign players have also entered the market owing to the profit margins, constant demand and right valuation.
- Cement companies will go for the global listings either through the FCCB route or the GDR route.

### Tie – up with overseas
- India has joined hands with Switzerland to reduce energy consumption and develop newer methods in the country for more efficient cement production, which would help India meet its rising demand for cement in the infrastructure sector.

### Housing for All
- The Union Budget 2016 – 17 has been favourable for the infrastructure sector, mainly for roads, which would eventually influence the cement industry of the country.
- In the budget, the GOI, allocated a total of USD8.22 billion for the development of roads & highways of India, bracing the cement industry of India.
- Housing sector is considered to drive the cement industries in India to a great extent, which held nearly 67 per cent of the total cement consumption in India.

*Source: Union Budget 2016 – 17, Emkay Global Financial Services*

*Note: GOI – Government of India*
CAPACITY EXPANSION PLANS BY KEY PLAYERS ... (1/2)

- **Shree Cement**
  - In 2016, Shree Cement announced to spend around USD0.9 billion to establish three new clinker plants.
  - With the expansion, the production capacity of the company would increase from 23.6 mtpa to 33.6 mtpa

- **ACC**
  - The subsidiary of Holcim, has plans for a USD500 million capacity expansion in India
  - ACC will upgrade and expand its Jamul unit in Chattisgarh and its grinding unit in Jharkhand. This will increase ACC’s capacity to 38 mtpa from 30 mtpa in a phased manner by 2016 and 55 mtpa in 2020

- **Ambuja Cements**
  - Ambuja Cements is targeting an investment of USD580 million for capacity expansion in Rajasthan, Madhya Pradesh and Uttar Pradesh
  - The proposed project in Rajasthan is expected to add 5 MT to Ambuja Cements’ existing production capacity of 28.5 mtpa

- **Dalmia Cement**
  - Dalmia Cement is planning an investment of USD 333.3 million to ramp up its manufacturing capacity to 21 mtpa from the existing 17 mtpa over the next two years.
  - Dalmia has started up its operation at its new 2.5 MT greenfield unit at Belgaum in Karnataka. It also plans to scale up its two plants in North-East India for a total value of USD239 million and USD9.2 million, respectively.
  - Dalmia Cement Ltd. became the first cement company in India to commit itself to 100 per cent renewable power

*Source: TechSci Research*

Note: mtpa – million tonnes per annum; MT – Million Tonnes
CAPACITY EXPANSION PLANS BY KEY PLAYERS ... (2/2)

Heidelberg Cement
- Heidelberg Cement, a Germany-based cement manufacturer has commissioned Phase-I of its Jhansi grinding unit.
- The company has undertaken an investment worth USD259.4 million for expanding its capacity to 2.9 MT.
- Heidelberg aims to ramp up the operational capacity to 6 MT at its Damoh plant in Madhya Pradesh, striving to add an additional 9 MT by 2017.

UltraTech Cement
- After the acquisition of two cement plants in 2015, UltraTech has planned to construct two greenfield grinding units in West Bengal and Bihar.
- After the acquisition, the installed capacity of the company has reached 67mtpa. The capacity is likely to reach 71 mtpa, after the completion of expansion.
- As on October 2016, merger of Ultra tech cement and Jaiprakash Associates cement plants, with a total capacity of 21.1 million tonnes per annum (MTPA), was approved by the shareholders.

Amrit Cement
- Amrit Cement India Ltd (ACIL) has announced the launch of Amrit Cement in the North-Eastern market.
- The company plans to achieve a production level of 5 million tonnes per annum by FY16, through capacity expansion in North-Eastern Bihar and Nepal.

Emami Cement
- Emami Cement, a renowned brand of Emami Group, announced expansion plans with an investment of about USD74.7 million in 2016.
- The company has declared to set up a cement grinding plant in West Bengal and is also planning to build two other units in Andhra Pradesh and Rajasthan.
- The company plans to increase its capacity from existing 2.4 MT to 15-20 MT by 2021, with an investment of USD 1.27 billion.
CEMENT

PORTERS FIVE FORCES ANALYSIS
CONDUCTIVE INDUSTRY FORCES SUPPORT LONG-TERM ATTRACTIVENESS

- **High** – Huge capital investments required present substantial barriers to entry and achieving economies of scale.

- **Low** – The Indian cement market is oligopolistic in nature, characterised by tacit collusion, where large players partially control supply for better price discipline.

- **Moderate** – Cement players have to depend on the railways for carriage outward and local coal companies for fuel, although diversification of freight options and fuel sources is diminishing the suppliers’ power.

- **Low** – Although there are partial substitutes such as asphalt, glass, steel, wood, etc; practically cement has no direct substitutes.

- **Low** – Substantial market concentration among large players ensures low bargaining power of buyers.

Source: TechSci Research
**CEMENT**

**STRATEGIES ADOPTED**

- **Adoption of cement instead of Bitumen**
  - The Government of India has decided to adopt cement instead of bitumen for the construction of all new road projects on the grounds that cement is more durable and cheaper to maintain than bitumen in the long run.

- **Increase in Clean Energy Cess**
  - The Schedule Rate of Clean Energy Cess, levied on coal is being increased from Rs. 100 per tonne to Rs. 300 per tonne.
  - The increase in the clean energy cess may lead to rise of power and fuel cost in the cement companies.

- **Ready-mix concrete**
  - Companies are trying to develop a niche market for RMC (Ready Mix Concrete).
  - Penetration of RMC has been low at about 8 per cent (USA: 88 per cent; China: 33 per cent; Brazil: 32 per cent) because retail sales comprise mostly of bag cement.

*Source: Ministry of External Affairs, HDFC Bank Annual Report*
Cement

Strong Demand Drivers in the near term

<table>
<thead>
<tr>
<th>Housing growth</th>
<th>Infrastructure growth</th>
<th>Commercial real estate growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The Housing segment accounts for a major portion of the total domestic demand for cement in India</td>
<td>• The government is strongly focused on infrastructure development to boost economic growth and is aiming for 100 smart cities</td>
<td>• The government is strongly focused on infrastructure development to boost economic growth</td>
</tr>
<tr>
<td>• Real estate market is expected to grow at a CAGR of 11.6 per cent over 2011–20, with the market expected to reach USD180 billion by 2020</td>
<td>• It plans to increase investment in infrastructure to USD1 trillion in the 12th Five Year Plan (2012–17), compared with USD514 billion under the 11th Five Year Plan (2007–12)</td>
<td>• It plans to increase investment in infrastructure to USD1 trillion in the 12th Five Year Plan (2012–17), compared with USD514 billion under the 11th Five Year Plan (2007–12)</td>
</tr>
<tr>
<td>• Growing urbanisation, an increasing number of households and higher employment are primarily driving the demand for housing, accounting for 67 per cent of the total consumption</td>
<td>• Infrastructure projects such as Dedicated Freight Corridors as well as new and upgraded airports and ports are expected to further drive construction activity,</td>
<td>• Infrastructure projects such as Dedicated Freight Corridors as well as new and upgraded airports and ports are expected to further drive construction activity,</td>
</tr>
<tr>
<td>• Initiatives by the government are expected to provide an impetus to construction activity in rural and semi-urban areas through large infrastructure and housing development projects respectively</td>
<td>• The government intends to expand the capacity of the railways and the facilities for handling and storage to ease the transportation of cement and reduce transportation costs</td>
<td>• The government intends to expand the capacity of the railways and the facilities for handling and storage to ease the transportation of cement and reduce transportation costs</td>
</tr>
</tbody>
</table>

**STRONG DEMAND DRIVERS IN THE NEAR TERM**

<table>
<thead>
<tr>
<th>Government Initiatives towards New Schemes</th>
<th>Development in Metro, Roads, Airports</th>
<th>Urbanisation and industrialisation development in the country</th>
</tr>
</thead>
</table>
| • Initiatives by the new government such as housing for all, smart cities, Swachh Bharat campaign, infrastructure spending, concrete roads initiative and an increase in allocation of funds to states are likely to see a positive impact on the industry in the next three-six months. | • The metro rail projects in Mumbai, Bangalore and Hyderabad and the expansion phase in Delhi drives cement demand  
• Airports modernisation across major cities will also expand demand for cement industry  
• The latest development in the Ahmedabad Metro Rail Project has also driven the cement demand to a large extent. | • The new urban development mission will focus on development of 500 cities having population of more than 100,000 and some cities of religious and tourist importance.  
• Infrastructure is a priority for the government’s economic policy; funding from private as well as public sectors is set to increase sharply in the near term which would anticipate the demand of cement industry in India. |

Demand for cement is highly correlated with cyclical activities like construction and development.

Housing sector accounts for a significant 67% of the total cement demand (USA: 22 per cent; China: 25 per cent; Brazil 56 per cent).

Real estate market is expected to grow at a CAGR of 17.2 per cent during 2011–15 to USD126 billion. It is anticipated to reach USD180 billion by 2020.

The rapidly increasing real estate industry in India is expected to push the demand for cement.

- Residential real estate demand is driven by rising population and growing urbanisation.
- Rising income levels are leading to higher demand for luxury projects.
- Demand for affordable housing is growing in order to meet the demand from lower income groups.

Commercial real estate demand will be driven by growth in IT/ITeS sector and organised retail.

Major cement demand drivers (FY15):

- Housing Sector: 67%
- Infrastructure: 9%
- Commercial: 13%
- Industrial: 11%

Source: TechSci Research, Ministry of External Affairs (Investment and Technology Promotion Division), \(^1\) Cement Vision 2025, AT Kearney
INVESTMENT IN INFRASTRUCTURE DRIVING SECTOR’S GROWTH

- Investment in infrastructure is the main growth driver for the cement industry.
- The NITI Aayog estimates total infrastructure spending to be about of 9 per cent of GDP during the 12th Five Year Plan (2012-17), up from 7.2 per cent during the previous plan (2007-12).
- India’s investment in infrastructure is estimated to double to about USD1 trillion during the 12th Five Year Plan (2012–17) compared to the previous plan.

![Infrastructure spending as % of GDP](image)

Infrastructural spending is the main driver of the cement industry. The NITI Aayog estimates total infrastructure spending to be about 9% of GDP during the 12th Five Year Plan (2012-17), up from 7.2% during the previous plan (2007-12). India’s investment in infrastructure is estimated to double to about USD1 trillion during the 12th Five Year Plan (2012-17) compared to the previous plan.

Source: CMIE Database, TechSci Research

Note: Additional capacity creation estimates are based on increase in base lines, roads, housing and fiscal support.
### Utilisation Rates Estimated to Improve

#### North

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>78%</td>
<td>80%</td>
<td>86%</td>
</tr>
</tbody>
</table>

#### South

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>56%</td>
<td>61%</td>
<td>67%</td>
</tr>
</tbody>
</table>

#### West

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>73%</td>
<td>73%</td>
<td>84%</td>
</tr>
</tbody>
</table>

#### Central

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>78%</td>
<td>81%</td>
<td>90%</td>
</tr>
</tbody>
</table>

#### East

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>75%</td>
<td>71%</td>
<td>81%</td>
</tr>
</tbody>
</table>

#### All India

<table>
<thead>
<tr>
<th>Year</th>
<th>FY14</th>
<th>FY16F</th>
<th>FY17F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilisation</td>
<td>71%</td>
<td>75%</td>
<td>85%</td>
</tr>
</tbody>
</table>

*Source: CMA (Cement Manufacturers Association), Centrum Report, TechSci Research*

*Note: F - Forecast*
Total cement production capacity in India stood at 395 million in FY16.

The strong momentum in capacity addition is not surprising given the sharp growth in construction, infrastructure and real estate in Indian economy.

Hence, the 12th Five Year Plan is estimated to have an additional capacity requirement of 139.7 million tonnes by FY17.

The total FDI in cement and gypsum industry reached USD3.11 billion, between April 2000-September 2016.

Adani Cementation Ltd signed an MoU with Gujarat government to set up a clinkering unit with an investment of US$ 840.20 million.

Companies like Ultratech Cement, Shree Cement and Vadraj Cement Ltd signed MoUs with the Gujarat government for setting up cement manufacturing plants in the state with investment of US$ 381.9 million each.
## CASES OF SUCCESSFUL USE OF ALTERNATE FUELS IN CEMENT PRODUCTION

<table>
<thead>
<tr>
<th>Company/Plant</th>
<th>Strategy</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madras Cement's Alathiyur plant</td>
<td>Use bioenergy through burning of coffee husk and cashew nut shells</td>
<td>Annual cost savings of USD1.7 million</td>
</tr>
<tr>
<td>India Cements Ltd's Dalavoi plant</td>
<td>Use Low Sulphur Heavy Stock (LSHS) sludge as alternate fuel</td>
<td>Annual savings of USD6,500 approx</td>
</tr>
<tr>
<td>UltraTech’s Gujarat Cement Works</td>
<td>Use tyre chips and rubber dust as alternate fuel</td>
<td>Reduction of about 30,000 tonnes of carbon emissions annually</td>
</tr>
<tr>
<td>Lafarge’s Arasmeta plant</td>
<td>Substitute 10 per cent of coal used in kilns with rice husk</td>
<td>Higher energy savings and lower carbon emissions</td>
</tr>
</tbody>
</table>

Source: CMA, TechSci Research
NORTH-EAST INDIA: A LAND OF OPPORTUNITIES FOR CEMENT FIRMS

NE India: Cement demand

- The North Eastern (NE) region has consistently been in cement deficit for several years
- At present, cement demand in the NE is about 5.2 mtpa

NE India: Cement supply

- Cement manufactured locally is inadequate to meet the local demand for cement
- The deficit is met through cement purchased from other parts of India
- High transportation costs cause the landed costs of cement to increase considerably

NE India: Cement demand-supply (2016-17E)

Source: Industry Sources, TechSci Research
Note: mtpa - Million Tonnes Per Annum
NORTH-EAST INDIA: DEMAND DRIVERS FOR CEMENT

* The Government has approved a package of fiscal incentives and other concessions for the North Eastern Region, namely the North East Industrial and Investment Policy, 2007, effective from 1 April, 2007

* The major policy and fiscal initiatives are expected to catalyse infrastructure and industrial development in the region, spurring the demand for cement

* Dungsam Cement, a Bhutan-based player, is entering the Indian market, targeting mainly the North-East market

**NE states projected GDP growth at constant prices**

<table>
<thead>
<tr>
<th></th>
<th>XI 5-yr Plan</th>
<th>XII 5-yr Plan</th>
<th>XIII 5-yr Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>XI 5-yr Plan</td>
<td>10.0%</td>
<td>13.7%</td>
<td>16.4%</td>
</tr>
</tbody>
</table>

**NE states projected per capita income growth**

<table>
<thead>
<tr>
<th></th>
<th>XI 5-yr Plan</th>
<th>XII 5-yr Plan</th>
<th>XIII 5-yr Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>XI 5-yr Plan</td>
<td>8.6%</td>
<td>12.4%</td>
<td>15.2%</td>
</tr>
</tbody>
</table>
CEMENT

SUCCESS STORIES
UltraTech is India’s largest exporter of cement clinker spanning export markets in countries across the Indian Ocean, Africa, Europe and the Middle East.

UltraTech and its subsidiaries have a presence in five countries through 12 integrated plants, 1 white cement plant, one clinkerisation plant, 17 grinding units, two rail and three coastal terminals, and 101 RMC plants.

It has an annual capacity of 64 MT.

Projects: Mumbai Metro, Bangalore Metro Rail, Kolkata Metro Rail, Monorail, Coastal Gujarat Power.

For the quarter ending on September 2016, the company reported consolidated net profit of USD 93.74 million.

**Milestones**

- 2004 – Acquisition of L&T’s Cement Business: UltraTech Cement Ltd
- 2006 – Narmada Cement Company Limited amalgamated with UltraTech
- 2010 – Samruddhi Cement Limited amalgamated with UltraTech Cement Limited
- 2012 – Acquisition of Adhunik Cement’s Meghalaya plant
- 2013 – Buys Jaypee Cement’s Gujarat unit
- 2015 – Commissioned 6000 TPD Clinkerisation line at Aditya Cement, (Rajasthan)
- 2016 – Greenfield & Brownfield expansion. Capacity: 67.7 mtpa (including 3 mtpa overseas)

**Revenue and Profit After Tax (PAT) in USD billion**

<table>
<thead>
<tr>
<th></th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>2.8</td>
<td>3.6</td>
<td>3.9</td>
<td>3.6</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>PAT</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.4</td>
<td>0.3</td>
<td>0.30</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Source: Company website, TechSci Research
Notes: RMC – Ready Mix Concrete
PAT – Profit after tax
Ambuja Cements Ltd (ACL) is one of the leading cement manufacturing companies in India.

The company, initially called Gujarat Ambuja Cements Ltd, was founded by Narotam Sekhsaria in 1983.

Ambuja Cements is the second largest cement manufacturer in India, with nearly 10 per cent of the market share of total installed capacity.

It is the market leader in Northern India with 29 per cent of the total installed capacity.

**Milestones**

- **2010** – Started cement plant at Nalagarh, Himachal Pradesh and Dadri, Uttar Pradesh with a capacity of 1.5 million tonnes.
- **2011** – Acquired 85 per cent stake in Nepal-based Dang Cement.
- **2012** – Expansion of Sankrail Grinding Unit, thereby increasing the capacity from 1.5 mtpa to 2.4 mtpa.
- **2013** – Acquiring Holderind Investments Ltd, Mauritius (Holcim), These transactions will result in Ambuja holding 50.01 per cent stake in ACC.
- **2015** – Ambuja Cement becomes the leading water positive cement company in India with 4.03 times water positive factor.

**Revenue and Profit After Tax (PAT) in USD billion**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>PAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td>2009</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td>2010</td>
<td>1.7</td>
<td>0.3</td>
</tr>
<tr>
<td>2011</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2012</td>
<td>1.9</td>
<td>0.2</td>
</tr>
<tr>
<td>2013</td>
<td>1.6</td>
<td>0.2</td>
</tr>
<tr>
<td>2014</td>
<td>1.7</td>
<td>0.2</td>
</tr>
<tr>
<td>2015</td>
<td>1.5</td>
<td>0.1</td>
</tr>
<tr>
<td>2016</td>
<td>0.4</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Source: Company website, TechSci Research
Notes: mtpa – Million Tonnes Per Annum
PAT – Profit after tax
2016\(^1\) indicates data from January 2016 – March 2016

For updated information, please visit [www.ibef.org](http://www.ibef.org)
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E-mail: nccbm@vsnl.com; info@ncbindia.com
**CMA**: Cement Manufacturers’ Association

**GDP**: Gross Domestic Product

**GoI**: Government of India

**INR**: Indian Rupee

**MTPA**: Million Tonnes Per Annum

**NE India**: North-East India

**FY**: Indian Financial Year (April to March)

- So FY10 implies April 2009 to March 2010

**USD**: US Dollar

- Wherever applicable, numbers have been rounded off to the nearest whole number
Exchange rates (Fiscal Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>44.81</td>
</tr>
<tr>
<td>2005–06</td>
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<tr>
<td>2006–07</td>
<td>45.14</td>
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<td>2007–08</td>
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<tr>
<td>2008–09</td>
<td>46.14</td>
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<tr>
<td>2009–10</td>
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<tr>
<td>2010–11</td>
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<td>2011–12</td>
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<td>2012–13</td>
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<td>2013–14</td>
<td>60.28</td>
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<td>2014–15</td>
<td>61.06</td>
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<tr>
<td>2015–16</td>
<td>65.46</td>
</tr>
<tr>
<td>2016–17 (E)</td>
<td>66.95</td>
</tr>
</tbody>
</table>

Exchange rates (Calendar Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>INR equivalent of one USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>43.98</td>
</tr>
<tr>
<td>2006</td>
<td>45.18</td>
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<tr>
<td>2007</td>
<td>41.34</td>
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<tr>
<td>2008</td>
<td>43.62</td>
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<tr>
<td>2009</td>
<td>48.42</td>
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<td>2010</td>
<td>45.72</td>
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<td>2011</td>
<td>46.85</td>
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<td>2012</td>
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<tr>
<td>2013</td>
<td>58.44</td>
</tr>
<tr>
<td>2014</td>
<td>61.03</td>
</tr>
<tr>
<td>2015</td>
<td>64.15</td>
</tr>
<tr>
<td>2016 (Expected)</td>
<td>67.22</td>
</tr>
</tbody>
</table>

Source: Reserve bank of India, Average for the year
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