Agenda

- Cummins in India
- Macroeconomic Environment
- Business Overview
- Focus on Corporate Responsibility
Anant Talaulicar

- Joined Cummins in 1986
- Current job title:
  - Chairman and Managing Director, India ABO and Cummins India Limited
- Roles and Responsibilities:
  - Overall business strategy and functioning of the Cummins Group in India
  - Has worked across the Company’s businesses in the United States and India
  - Has garnered a variety of functional and operational experiences having worked in Finance, Manufacturing, Product Management, Corporate Strategy, Marketing and General Management
  - In addition to being CMD for the Cummins Group in India, has worked in the dual role of President – Components Business, Cummins Inc., from 2010 to December 2014
  - Moved to India in 2003 and became the Managing Director of Cummins India in 2004
  - Has held number of leadership roles in Power Generation – commercial and consumer lines of business
- Educational Background
  - Bachelor’s degree in Mechanical Engineering from Mysore University
  - Completed his MS from University of Michigan in Ann Arbor
  - Masters in Business Administration from Tulane University, US
  - Chairman of National Manufacturing Council of the Confederation of Indian Industries
Rajiv Batra

- Current job title:
  - Chief Financial Officer, Head-Facilities, India ABO and Cummins India Limited

- Roles and Responsibilities:
  - Oversees the Financial functions at CIL and other entities of the Cummins Group in India
  - Business Partnership
  - Ensures effective processes with strong controls
  - Involved in building strong linkages to key corporate functions ensuring compliance to global corporate policies and practices

- Educational Background
  - Chartered Accountant with over 30 years of work experience in India and the United States.
  - Co-Convenor, CII Maharashtra Finance & Taxation Panel
  - Chairman of CII WR (Western Region) Sub Committee on Power in 2013-14
Strategic Leadership Team

Anant Talaulicar
Chairman and Managing Director – India ABO

Sandeep Sinha
Chief Operating Officer

Rajiv Batra
Finance & Facilities

Sudha Dhar
Chief Information Officer & GAC

Ashish Aggarwal
Government Relations

TBD
Strategy

Qureish Shipchandler
Internal Audit

Vikas Thapa
Human Resources

Venkat Ramana
Legal & Secretarial
Operating Leadership Team

Sandeep Sinha
Chief Operating Officer – India ABO

Ashwath Ram
Engine Business & HMLD Engine Business India

Mandar Deo
HHP Engine Business India

Amit Kumar
Power Generation

Bhavana Bindra
Distribution Business

Milind Madani
New & ReCon Parts India

Anjali Pandey
Cummins Turbo Technologies

Manish Gulati
Cummins Fuel Systems

G.K Sharma
Cummins Emission Solutions

Niranjan Kirloskar
Fleetguard Filters

Sandeep Kalia
Valvoline Cummins

Jayeeta Lakhani
Director Product Planning & Mgmt.

Hardik Shah
SCM Director

Aditi Sharma
Quality Champion

Paul Sowerby
CTCI / CRTI / Eng

Shamli Chapalge
Corporate Communications & Branding

Manoj Solanki
Purchasing

Babu Nagarajan
Cummins Business Services

Anjali Pandey
Cummins Turbo Technologies
Cummins in India – Since 1962

1962
- Cummins Diesel Sales & Service India (CDS&S)

1967
- Kirloskar Cummins Ltd.
- Fleetguard Filters Ltd.

1987
- Tata Cummins Ltd.

1989
- Newage JV with Crompton

1993
- Tata Holset Ltd.

1994
- Valvoline Cummins Ltd.

1997
- Cummins India Ltd.

1998
- Nelson Engineering Ltd.

2000
- Cummins Technologies India Ltd.

2002
- CES/CBS
- CTT
- ReCon

2003
- Cummins Exhaust India Ltd (CEIL)

2008
- Exhaust Business (CEIL) Divested

2011
- KPIT Cummins Infosystems Ltd.

2014
- Cummins Research & Technology India Ltd.
- Cummins Generator Technologies
- Cummins Turbo Technologies

2015
- Cummins Turbo Technologies

2016
- Cummins Residential Campus
- Cummins Technical Training Center
- ABO Training Center

1962
CSS Merged into CIL(2009)

1997
Megasite

2000
Megasite Projects Completed

2011
IOC: Tower A

2014
IOC: Tower B

2015
IOC: Tower C

2016
CTCI project
Cummins in India

- In India since 1962
- 8 legal entities (including 3 JVs)
- Over 10,000 employees
- $1.6 bn combined sales

**Engine Value Packages**
(32-3500 HP)
Automotive, Construction, Mining, Compressors, Pumps, Marine, Railway, Oil & Gas, Defense

**Power Generation**
Gensets (7.5-3750 kVA), Energy Management, Captive Power Plants, Alternators

**Components & Consumables**
Filtration, Turbochargers, Emission Solutions, Lubricants

**Services**
R&D, Sourcing, Analytics

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Valvoline
Cummins
Cummins Sales & Service
NCR
Cummins Turbo Technologies
Dewas / Pithampur
Valvoline
Cummins
Mumbai/Ambernath
Cummins India Ltd.
Fleetguard Filters
Cummins Research & Technology India
Cummins Generator Technologies
India Office Campus
Pune

Cummins Turbo Technologies
Fleetguard Filters
Rudrapur

Tata Cummins
Fleetguard Filters
Jamshedpur

Cummins Generator Technologies
Ahmednagar / Ranjangaon

Megasite
Phaltan

Fleetguard Filters
Hosur
Organization Structure

**Cummins in India**

**Entities:**

1. Cummins India Ltd.
2. Cummins Research and Technology India Pvt. Ltd.*
3. Cummins Generator Technologies India Pvt. Ltd.
4. Cummins Technologies India Pvt. Ltd.
5. Tata Cummins Pvt. Ltd.
6. Fleetguard Filters Pvt. Ltd.
7. Valvoline Cummins Pvt. Ltd.
8. Cummins Sales and Service Pvt. Ltd. (Formerly known as Cummins Svam Sales & Service Limited)

**Business Units:**

- **Engine Business**
  - HMLD + HHP
  - ReCon
- **Power Generation Business**
  - Generators
  - Alternators
- **Component Businesses**
  - Filtration
  - Emission Solutions
  - Turbo
  - Fuel Systems
  - Electronics
- **Distribution Business** (1 PDC/ 5 Zonal Offices / 21 Area Offices / 212 Dealer sites, 1 service JV)
- **Lubricants**

**Shared Services:** CBS/Cummins Technical Center India (CTCI) /IPO/Internal Audit/ Global Analytics Center (GAC)

*CRTI operations to be merged into larger entities within India*
Cummins in India Strategy

**Strategy**

**Enhance Domestic Market Leadership**
- Grow market share through adjacencies and leverage emissions to grow Components business
- Defend and grow engine and genset market share with fit for market products
- Excel in supporting customers

**Maintain Low Cost Producer Status**
- Reduce extended supply chain costs continuously
  - Accelerated Cost Efficiency (ACE), Six Sigma, Total (Cost) Reduction Indirect Material & Services (TRIMS), Synchronized Business Planning (SBP)

**Maximize Exports from India to CMI**
- Low kVA Gensets, QSK 23 / 60 Engines, Turbos, ReCon parts, Components

**Great Place to Work**
- Cummins Megasite, Office Campus, Technical Center
- Hire to develop diverse talent
- Leadership development

**Overview**

- Grow market share through adjacencies and leverage emissions to grow Components business
- Defend and grow engine and genset market share with fit for market products
- Excel in supporting customers

- Reduce extended supply chain costs continuously
  - Accelerated Cost Efficiency (ACE), Six Sigma, Total (Cost) Reduction Indirect Material & Services (TRIMS), Synchronized Business Planning (SBP)

- Low kVA Gensets, QSK 23 / 60 Engines, Turbos, ReCon parts, Components

- Cummins Megasite, Office Campus, Technical Center
- Hire to develop diverse talent
- Leadership development
India ABO Domestic Sales

- Present in India for over 50 years
- Market leadership
- Strong OEM relationships
- Expanding our markets

Domestic consolidated + unconsolidated revenue

KPI T Cummins excluded from Joint Venture Sales Unconsolidated beginning 2013 due to reduction in ownership interest
India ABO Exports

$ Billions

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$0.3</td>
</tr>
<tr>
<td>2012</td>
<td>$0.3</td>
</tr>
<tr>
<td>2013</td>
<td>$0.3</td>
</tr>
<tr>
<td>2014</td>
<td>$0.4</td>
</tr>
<tr>
<td>2015</td>
<td>$0.4</td>
</tr>
</tbody>
</table>

* KPIT revenue not considered
Agenda

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Economy showing signs of recovery albeit slower than expected

Overall GDP growth*

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 09-10</td>
<td>7.4%</td>
</tr>
<tr>
<td>FY 10-11</td>
<td>8.5%</td>
</tr>
<tr>
<td>FY 11-12</td>
<td>6.5%</td>
</tr>
<tr>
<td>FY 12-13</td>
<td>5.0%</td>
</tr>
<tr>
<td>FY 13-14</td>
<td>4.7%</td>
</tr>
<tr>
<td>FY 14-15</td>
<td>5.6%</td>
</tr>
<tr>
<td>FY 15-16 (Fcst)</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

* GDP numbers are at factor cost
Govt. has shifted to new method of calculating GDP at market prices which increases rate by 1 to 1.5% points
Index of Industrial Production

- Index of Industrial Production (IIP) at (1.3)% for December 2015
  - Manufacturing sector contracted 2.4% in December 2015 impacted by Chennai floods
  - Mining and electricity grew 2.9% and 3.1% respectively in December 2015
## Power Sector Update

### Power Demand vs. Supply Growth Dec YoY

<table>
<thead>
<tr>
<th>Region</th>
<th>Demand Growth</th>
<th>Supply Growth</th>
<th>Peak Deficit Dec’15</th>
<th>Peak Deficit Dec’14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Region</td>
<td>-7%</td>
<td>-4%</td>
<td>-3.2%</td>
<td>-6.2%</td>
</tr>
<tr>
<td>Western Region</td>
<td>4%</td>
<td>4%</td>
<td>-0.5%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>Southern Region</td>
<td>-2%</td>
<td>1%</td>
<td>-1.8%</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Eastern Region</td>
<td>14%</td>
<td>14%</td>
<td>-0.9%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>North-East Region</td>
<td>-4%</td>
<td>7%</td>
<td>-1.5%</td>
<td>-11.8%</td>
</tr>
<tr>
<td>All India</td>
<td>-4%</td>
<td>-2%</td>
<td>-1.7%</td>
<td>-3.6%</td>
</tr>
</tbody>
</table>

- Power demand growth subdued (~3-4% growth YoY); Peak power deficit hovering within 2-3% range
- Per-capita electricity consumption of the country has now crossed 1,000 kilowatt-hour (kWh), but still, it is far below the average global consumption.
# Government Investment in Infrastructure

<table>
<thead>
<tr>
<th>Key focus areas</th>
<th>2014-15 ($M)</th>
<th>2015-16 ($M)</th>
<th>% Growth</th>
<th>2015-16 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>4,116</td>
<td>6,260</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>▪ Build roads from India's west-to-east land border</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railways</td>
<td>4,934</td>
<td>6,260</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>▪ Electrification, improvement of speed of trains and safety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping</td>
<td>74</td>
<td>146</td>
<td>97%</td>
<td></td>
</tr>
<tr>
<td>▪ Port connectivity and inland water ways</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ National waterways development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defense</td>
<td>36,766</td>
<td>38,607</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>▪ Build indigenous combat vehicles, warships, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry &amp; minerals</td>
<td>6,459</td>
<td>6,745</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>▪ Permission to private companies to mine and sell coal in the open market</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>25,393</td>
<td>26,182</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>▪ 5 ultra mega power projects (coal-based) planned (4000 MW each)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smart cities</td>
<td>398</td>
<td>923</td>
<td>132%</td>
<td></td>
</tr>
<tr>
<td>▪ Build 100 smart cities in India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ports</td>
<td>41</td>
<td>61</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>▪ Corporatization of public sector ports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban development</td>
<td>1,266</td>
<td>1,570</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>▪ Affordable housing, sanitation and development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Emission norms are gaining traction

### Changing Emission Norms

**HMLD on-highway**

- **BSIV**
  - PAN India implementation in April 2017
- **BSV and VI**
  - The latest direction is the possibility to skip BSV due to environmental concerns and implement BSVI from April 2020 for new models and 2021 for old models

**Power Generation**

- Discussion underway for CPCB II norms to be applied for > 800 KWm gensets at IDEMA
- Discussions required to deliberate < 800 kWm move to CPCB III for all nodes

### Changing Emission Norms

**HMLD off-highway (wheeled)**

- **BSIV**
  - PAN India implementation in April 2017
- **BSV and VI**

**Changing Emission Norms**

- Currently, Bharat Stage III (CEV) (equivalent to Euro Stage IIIA) are applicable for wheeled vehicles
- Proposal for introduction of Bharat (Non-road) stage IV norm by 2020 for wheeled vehicles
Agenda

- Cummins in India
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- Business Overview
- Focus on Corporate Responsibility
Key Trends / Drivers

- Thrust on industry and infrastructure development expected to increase power demand
- Power deficit expected to continue at current levels of 2% due to:
  - Unreliable utility power and unstable grid supply
  - High T&D losses and dismal state of Discoms
- Modest growth in gross fixed capital formation expected (may accelerate if economy improves)

Power generation market

<table>
<thead>
<tr>
<th>Segment</th>
<th>Total Market Size ($M)</th>
<th>Genset* Sales ($M)</th>
<th>Cummins Market Share %</th>
<th>Strengths</th>
</tr>
</thead>
</table>
| R-LHP 7.5 - 62.5 kVA | 312 | 44 | 14% | • Leverage existing MHP/HHP customer base  
  • Service network |
| LHP 70 – 160 kVA | 129 | 49 | 38% | • Superior quality product  
  • Leverage existing MHP/HHP customer base  
  • Service network |
| MHP 180 – 500 kVA | 202 | 103 | 51% | • Product leadership  
  • Strong GOEM channel  
  • Service network |
| HHP >500 kVA | 218 | 122 | 56% | • Established products and local manufacturing  
  • Strong GOEM channel  
  • Service network |
| Total | 860 | 318 | 37% |  |

* Genset sales : 80% represents Cummins engine & alternator ; 20% captured by GOEMs
HHP Overview

Key Trends / Drivers

- **Rail** – Government’s increased focus on speed, safety, connectivity and enhanced capacity
- **Mining** - Increased privatization and impetus towards higher production of coal by government. Movement towards higher tonnage dump trucks
- **Marine** - Fleet expansion and modernization by Indian Navy, Coast Guard leading to demand
- **Oil & Gas** – Increase in gas distribution stations (IGL, MNGL etc.) – Gas compressor market; consistent demand for offshore emergency DG market

### Key Trends / Drivers

<table>
<thead>
<tr>
<th>Segment</th>
<th>Total Market Size ($M)</th>
<th>Addressable Market Size ($M)</th>
<th>Cummins Sales 2015 ($M)</th>
<th>Cummins Market Share %</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rail</strong></td>
<td>113</td>
<td>20</td>
<td>16</td>
<td>80%</td>
<td>- Strong position in DEMU and Power Car.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Service network</td>
</tr>
<tr>
<td><strong>Mining</strong></td>
<td>33</td>
<td>33</td>
<td>10</td>
<td>42%</td>
<td>- Major Product Dump Truck</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Service Network</td>
</tr>
<tr>
<td><strong>Marine</strong></td>
<td>25</td>
<td>19</td>
<td>7</td>
<td>35%</td>
<td>- Market share mainly DG set and Main Propulsion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Indian shipyards attracting orders from other countries(Sri Lanka, Mauritius)</td>
</tr>
<tr>
<td><strong>Oil &amp; Gas</strong></td>
<td>9</td>
<td>5</td>
<td>2</td>
<td>41%</td>
<td>- City Gas Distribution market picking up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Entry into Off-shore Crane market</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>180</td>
<td>77</td>
<td>35</td>
<td>46%</td>
<td></td>
</tr>
</tbody>
</table>

**Rail**: Total market includes Mainline Loco ($94 M)

**Mining**: Market share represents secondary sales data, BEML supply to end users

**Marine**: Total Market includes Main propulsion >2500HP and fishing trawler market ($3 M)

**Oil & Gas**: Total market includes >500HP zone II engines
### Key Trends / Drivers

- Government’s push for affordable housing, sanitation and urban and rural development
- Government’s plan to build 100 smart cities
- Global OEMs using India as a base for exports
- GoI investing in building roads at the rate of 30 km/day (current 15 km/day)

### HMLD Off-Highway Overview

<table>
<thead>
<tr>
<th>Segment</th>
<th>Total Market Size ($ M)</th>
<th>Addressable Market Size ($ M)</th>
<th>Cummins Sales 2015 ($ M)</th>
<th>Cummins Market Share %</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>58%</td>
<td>Strong leadership in the Water Well Drill Rigs market for past one decade</td>
</tr>
<tr>
<td>Compressor</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>99%</td>
<td>End-user pull for Cummins powered compressors in Water Well Drill Rigs</td>
</tr>
<tr>
<td>Construction</td>
<td>122</td>
<td>52</td>
<td>26</td>
<td>52%</td>
<td>Robust application-engineered compressor packages</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Widespread and capable service network</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>74</td>
<td>45</td>
<td>61%</td>
<td>Leadership in the 6-cylinder business space in applications like 20T Excavators, Compactors and Wheel Loaders</td>
</tr>
</tbody>
</table>

- Strong value proposition over price competitive engine suppliers
- Strong engagement and relationship with key OEM’s like JCB, Hyundai and Tata Hitachi
- One engine (6B) – globally supported

**Construction:** Total Market includes Compact segment < 100 hp ($ 70 M)
## Key Trends / Drivers

- Fuel economy will continue to be a major driver
- BSIV emission norms to be implemented nationwide by Apr-2017
- Likely introduction of GST to help development of hub and spoke model the full impact of which would be seen in 3-4 years time
- Migration to higher tonnage nodes expected due to growth in infrastructure
- With initial acquisition cost going up with BSIV systems, fuel economy, reliability and durability will be critical
- Bus body code expected to bring additional safety requirements

### Cummins Market Share %*

<table>
<thead>
<tr>
<th>Segment</th>
<th>Market Size (#000)</th>
<th>Cummins Sales (#000)</th>
<th>Market Share %*</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5-12T</td>
<td>41</td>
<td>3</td>
<td>7%</td>
<td>• Market share mainly in defence application</td>
</tr>
<tr>
<td>12-16T</td>
<td>59</td>
<td>9</td>
<td>16%</td>
<td>• Strategically, TML using own engine in this segment</td>
</tr>
<tr>
<td>&gt;16T</td>
<td>167</td>
<td>106</td>
<td>63%</td>
<td>• Customer perception of durability especially in overloading segment</td>
</tr>
<tr>
<td>Bus</td>
<td>53</td>
<td>12</td>
<td>22%</td>
<td>• Cost competitive and reliable FFM 5.9 litre product</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>320</td>
<td>129</td>
<td>40%</td>
<td>• Wide OEM sales and service network with TML</td>
</tr>
</tbody>
</table>

* Market share based on volumes.

Market size - 2015 production volumes as per SIAM data.
Components (Turbos) Overview

Key Trends / Drivers

- Emissions – BS IV PAN India implementation in April 2017. Possibility to skip BSV implement BSVI from April 2020 for new models and 2021 for old models
- MHCV - Implementation of GST would support the hub and spoke model driving sales towards HCVs/trailers and ICVs further
- Bus - Demand for MHCV buses would be supported by increased mobility needs under 100 smart cities program and the AMRUT initiative

Components (Turbos)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Total Market Size ($ M)</th>
<th>Cummins Sales ($ M)</th>
<th>Cummins Market Share %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbos</td>
<td>93</td>
<td>52</td>
<td>56%</td>
</tr>
</tbody>
</table>

Strengths

- Number one player in >3.5T CV Segment
- Drastically improved market share with Major (non EBU) OEM's last year
- Targeting to increase its presence in LD segment by introducing C6 product
Exports: Key Growth Drivers

- Low kVA – Enable exports business growth by continued focus on Cost, Products, Quality & Lead Time
- HHP - Shifting of K19/Q19 production from Seymour Engine Plant (SEP) to PHP
- CTCI - become technology leader in emerging markets such as India, to grow market share and enable end to end product development for Cummins
- GAC - Create world-class capabilities in the area of data analytics which would support CMI in achieving the growth plans
Established in 1962, 51% subsidiary of Cummins Inc.
Manufactures a variety of engines operating on diesel, natural gas and dual fuel
Provides innovative solutions across Industrial, Power Generation and Automotive applications and service support
Manufacturing capacity of over 75,000 engines p.a.
Plants manufacture engines of various models – NTs, V28, K/KV & Q series
Amongst India’s largest exporters of Engineering Products
5 plants : Kothrud, Pirangut & PDC plant at Phaltan and PGBU-SEZ
Tata Cummins Ltd (TCL)

- Established in 1993
- 50:50 joint venture between Tata Motors Limited and Cummins Inc.
- Manufactures engines operating on diesel
- Caters to Automotive, Commercial Vehicle Industrial and Power Generation markets
- Manufacturing capacity of 250,000 engines per annum
- Plants manufacture engines of various models – B Mech, ISBe, ISLe, QSB & QSL
- 3 plants: 2 plants at the Megasite and 1 plant in Jamshedpur
Megasite Transformation

2007

2014
We outgrew our existing facilities by 2006 and needed to create a Megasite.

Phaltan selected because of:
- Availability of land for expansion
- Fiscal incentives
- Ability to locate export zone close to domestic plants
- Land costs
- Lower labor costs

Future Projects
- Fuel System
- Emission Solution
Megasite: DTA & SEZ – 225 acres

- **Tata Cummins II** (Q4 2010)
- **High HorsePower Rebuild Center** (Q1 2011)
- **ReCon** (Q1 2011)
- **Parts Distribution Center** (Q1 2011)
- **Phaltan Midrange Upfit Center** (Q1 2013)
- **Power Generation** (Q2 2013)
- **Engine Business QSK Engine** (Q2 2013)
- **India MidRange Engine Plant** (Q1 2015)

- **Fuel Systems** (2016-17)
- **Emission Solutions/ Power Generation (domestic tariff area)** (2016-17)

- B Series engines
- MidRange, Heavy duty, HHP engines
- Components
- Parts warehouse
- B,C,L series upfit
- Gensets and energy solutions
- QSK 23, 60 Series engines
- L, B, series engines
- Fuel systems
- Emission systems
Megasite Plants

PDC

PGBU SEZ

PMUC

HHP Rebuild
Megasite Plants

PHP

TCL
Cummins Technical Center in India
Overview

- **CTCI Building**
  - To provide a state-of-the-art technical center for the best Engine, Components and Power Generation company in the world. The objective of such an investment is:
    - To provide a global facility benchmark for the other locations to follow
    - To interface seamlessly with Cummins global entities and to serve Cummins’ worldwide technical organizations
    - To be an integrated and aligned Technical organization that serves the needs of every business both in India and worldwide
    - to provide the necessary global competitive edge and also leverage the vast technical talent pool. This building would house approx. 2500 engineers.

- **CTCI/EBU Test cell/ Labs**
  - Investing technical capital in capability development to support global and regional requirements. Also become technology leader in emerging markets such as India, to grow market share and enable end to end product development for Cummins.

A ‘Global Integrated Technical Organization’ to design technologies for the future for all businesses, both in India and worldwide
Accelerated Cost Reduction - Direct Purchasing

Accrued Saving

- ACE I started in 2005 with 4 entities
- ACE II onward increased focus on Localization and Resourcing project
- ACE III, best in ACE journey
- ACE IV Launched with 10 BU

Achieved savings of 2.0% - 2.5% of material cost
Considered Exchange rates are average of 3 Years for ACE Programs. Source for exchange rate: RBI Website

ACE I 1 USD = 43.1 INR
ACE II 1 USD = 46.53 INR
ACE III 1 USD = 55.55 INR
ACE IV 1 USD = 60.80 INR

*Achieved $47mn till date
Agenda

- Cummins in India
- Macroeconomic Environment
- Business Overview
- Focus on Corporate Responsibility
CR Focus Area and Themes

Anant Talaulicar

Higher Education (Vikas Thapa)
- Women Education and Employability Paul Sowerby
- Education Assistance to Socially and Economically Weaker Sections Sudha Dhar
- Vocational Education Bhavana Bindra

Energy And Environment (Rajiv Batra)
- Renewable Energy Rajiv Batra
- Indoor Air Pollution G K Sharma
- Outdoor Pollution (Air and Water) Bhavana
- Solid Waste Management K V Ramana
- Water Neutrality Babu Nagarajan/ Hardik Shah
- Afforestation Sudha Dhar

Local Infrastructure and Social Justice (Sandeep Sinha)
- Rural Development Projects Ashwath Ram
- NGO Development Manish Gulati and Qureish
- PwD(People with Disabilities) Amit K
- Women Entrepreneur Development in Socially weaker sections Aditi, Manoj Solanki

Restricted Confidential
Higher Education: Strategic Project
Cummins College of Engineering for Women

About the Project

- India's 1st engineering college exclusively for women set up at Pune in 1991 with a $130k corpus from Cummins India Foundation
- In partnership with Maharshi Karve Stree Shikshan Sanstha
- Cummins Signature project with the aim of being in the top 5% of privately managed Engineering colleges for UG in India by 2017. $1.6 Mn funding from Cummins

From 3 UG branches and 180 students in 1991 to 5 UG and 2 PG branches and 600 students in 2015.

6750 women engineers have passed out till 2015

Cummins Fellowship program from 2004 at Purdue: 38 students have benefitted

More than 70% students recruited on campus

Cummins senior management direct involvement

Academic Autonomy in 2016-17
Energy and Environment

Initiative

Water Neutrality

Led by Babu Nagarajan and Hardik Shah

- Number of Water Neutral sites: 20 of 21 (except TCL Jamshedpur, to be neutral by 2016)
- Total water conserved
  - In 2015: 6,500+ Mn gallons (~10,000 Olympic sized swimming pools)
  - In 2014: 3,000+ Mn Gallons
- Water consumption in 2014 across all plants is 145 Mn gallons

Afforestation

Led by Sudha Dhar

- Equivalent of 19610+ MT CO₂ footprint avoided
- 13,000+ trees planted and 30,000+ maintained in 2015
- Initiative had notable organic growth with
  - 4 NGO partners in 2015 v/s 1 NGO 2013
  - Plantation at 6 Sites in 2015 v/s 1 in 2013

Description

Water conserved (Mn gallons)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3,401</td>
<td>6,547</td>
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</table>

Trees planted and maintained

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5,000</td>
<td>20,700</td>
<td>34,300</td>
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## Energy and Environment

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
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</table>
| **Solid Waste Management**  | • House hold level Wet waste management project completed at Semi-urban community at Kasarabmoli, Pirangut  
| Led by K V Ramana           | • Various projects executed under this initiative:                         |
| Nirmalaya                   | ▪ Employees created human chain to protect water bodies from harmful substances during festivals such as Holi, Ganesh festival and others |
| Plastic & e-waste           | ▪ Awareness, collection and recycling of plastic and e-waste (non bio-degradable solid waste) by involving school children in Pune, India |
| Pollution prevention during Festival times | ▪ Prevent air, water and soil pollution during festival times, promote ecofriendly festival celebration, prevent hearing damage to animals, discourage people from buying crackers, prevent child labor |
| Zero Garbage                | ▪ Ensure segregation at source of waste (wet & dry) by creating awareness  
|                             | ▪ Converting wet waste into energy (powering streetlights & toy train at Katraj ward) – 6B5.9 (45kVA) Generator Set  
|                             | ▪ Demonstrating self sustainable revenue generating model through Toy train |
### Initiative

#### Outdoor Pollution
Led by Bhavana Bindra/GK Sharma

Aimed to improve Community Health by reducing HC, CO and PM components of air caused by unregulated diesel generator sets in use. This will be achieved by retrofitting the gensets with catalysts to help the environment.

#### Indoor Pollution
Led by GK Sharma

To reduce the problem of Household Air Pollution (HAP) through the adoption of clean cook stoves in Model Village households. Analysis-led design approach by CRTI has been utilized to design the energy efficient cook stoves.

#### Renewable Energy
Led by Rajiv Batra

Designed a gas filtration system for 6B engine for rural electrification using Husk biomass at Husk Power site with the following objectives:
- Power requirement
- Engine rating
- Gas Filtration system

Cummins converted one 6B 5.9 engine to 6BTA5.9 to run on Woody biomass based producer gas energy system and installed at PMUC, Megasite.
Strategic Project: Khadakwasla Dam (Water Neutrality)

About the Project

- Built in 1889, Khadakwasla dam is one of the main source of water for Pune city today
- Due to deforestation in the catchment area, the top soil has been washed off into the dam over the years

- In partnership with NGO, Cummins began the de-silting of Khadakwasla Dam in 2013. Since then:

  - Water conserved equivalent to 10,000 Olympic sized swimming pools in 2015
  - 5,000 Trees Planted in 2015
  - 3 sq.km area water harvested in dam from adjacent area
Local Infrastructure & Social Justice: Model Villages

In line with India ABO CR strategy to grow organically and replicate horizontally,

- Each plant location is working on development of model villages
- All plants have one model village, we now have 12 model villages across Cummins locations in India.
Thank You