Index

- Where have we been?
- The Way Ahead -
  - Strategic Direction : Product Plan
  - Growth Projects Overview
Index

- Where have we been?
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Cummins in India

- **In India since 1962**
- **9 companies (4 JV’s)**
- **More than 11,000 employees**
- **$1.3B unconsolidated sales (2009)**

**Engine Value Packages (60-2700 HP)**
Auto, Construction, Mining, Compressors, Pumps, Marine, Rail, Oil & Gas, Defense

**Power Generation**
Gensets (15-2000 kVA), Rentals, Energy Management, Captive Power Plants

**Components & Consumables**
Filtration, Exhaust Systems, Turbochargers, Alternators, Lubricants

**Services**
Engines, Gensets, IT/ITES, R&D, Sourcing

- **Valvoline Cummins**
  - **New Delhi**

- **CTIL – CTT**
  - **CTIL – PSMI (SEZ)**
  - **Dewas, Pithampur**

- **Gensets**
- **Cummins Exhaust**
- **Daman**

- **Cummins India Ltd.**
  - **Cummins Generator Technologies**
  - **KPIT Cummins**
  - **Cummins Business Services**
  - **International Purchasing Office**
  - **Fleetguard Filters Pvt. Ltd.**
  - **Cummins Research & Technology India**
  - **CTIL – PSMI (DTA)**
  - **CTIL - CES**
  - **Megasite**
  - **Pune**

- **Tata Cummins**
- **Fleetguard Filters Jamshedpur**

- **Cummins Generator Technologies**
  - **Ahmednagar, Ranjangaon**

- **Fleetguard Filters Hosur**
Strategic Leadership Team

Anant Talaulicar
President – Components Group and Managing Director – India ABO

Raj Menon
Chief Operating Officer

Rajiv Batra
Finance, IT, Strategy

Dinesh Castellino
Legal, Facilities & HSE

Nagarajan Balanaga
Human Resources

K.C. Ravi
Government Relations

Querish Shipchandler
Internal Audit
Operating Leadership Team

Raj Menon
Chief Operating Officer – India ABO

Industrial Engine Business
Arun Ramachandran
Automotive Business

Beau Lintereur
Power Generation Business

Sandeep Sinha
ReCon India

Amit Kumar
Distribution Business

Sandeep Chaudhry
Tata Cummins Operations

KN Harish
Quality Champion

Pradeep Bhargava
Cummins Turbo Technologies

Nitin Mantri
Cummins Turbo Technologies

Craig Barnes
CRTI & Eng

Bijoy Bose
IPO

Manoj Solanki
CEIL & CES

Senthil Kumaran
CBS

Naveen Gupta
Valvoline Cummins Ltd.

Sadashiv Pandit
Fleetguard Filters

Ravi Pandit
KPIT Cummins
India Organization Snapshot

Cummins in India

Cummins owned operations
1. Cummins India Ltd.
Cummins Sales and Service (India) Ltd. (now merged with Cummins India Limited)
2. Cummins Research & Technology India Ltd.
3. Cummins Exhaust India Ltd.
4. Cummins Generator Technologies India Ltd.
5. Cummins Turbo Technologies Ltd.

Joint Ventures
1. Tata Cummins Ltd.
2. KPIT Cummins Infosystems Ltd.
3. Fleetguard Filters Pvt. Ltd.
4. Valvoline Cummins Ltd.

Business Units:
- Engine Business
  - Automotive
  - Industrial
- Power Generation Business
- Component Businesses
  - Filtration
  - Exhaust
  - Turbo
  - Lubricants
- Distribution Business
  - 1 PDC/ 5 Zonal Offices / 21 Area Offices / 75 Dealers / 212 Dealer sites

Shared Services/CBS/R&D Centre/IPO/Internal Audit
Cummins in India Achievements: 2009

- Achieved $1.3B Revenue
- $168 M Profit
- New top level diverse leadership team
- Enhanced performance oriented meritocracy
- Exceeded strategic plan financial targets
Cummins in India Financial Progress after inter-company elimination

<table>
<thead>
<tr>
<th>Parameter</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>% CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$639M</td>
<td>$767M</td>
<td>$1,005M</td>
<td>$1,328M</td>
<td>$1,572M</td>
<td>$1,279M</td>
<td>15%</td>
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<tr>
<td>Profit</td>
<td>$56M</td>
<td>$82M</td>
<td>$119M</td>
<td>$171M</td>
<td>$194M</td>
<td>$168M</td>
<td>25%</td>
</tr>
<tr>
<td>Profit (%)</td>
<td>9%</td>
<td>11%</td>
<td>12%</td>
<td>13%</td>
<td>12%</td>
<td>13%</td>
<td>-</td>
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</table>

Note: Profit includes 100% consolidated entities PBIT, plus Cummins portion of unconsolidated JVs’ earnings.
Cummins India Ltd. – Flagship Company of Cummins in India

- 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
- Manufactures over 18,000 engines p.a.
- Amongst India’s largest exporters of Engg. Products
- 5 plants at Kothrud, Nagar Rd Pune, Loni, Daman and Pirangut
CIL – Sales Trend

Sales

CAGR: 14%

INR Cr.

Year | Sales (INR Cr.)
---|---
2000-01 | 883
2001-02 | 777
2002-03 | 878
2003-04 | 1,009
2004-05 | 1,271
2005-06 | 1,463
2006-07 | 1,841
2007-08 | 2,331
2008-09 | 3,304
2009-10 | 2,845
CIL – PAT Trend

CAGR: 17%
CIL – Dividend Trend

CAGR: 23%

* Dividend before Dividend distribution tax
CIL – Annualised Shareholder Return*

<table>
<thead>
<tr>
<th></th>
<th>CIL</th>
<th>BSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yr</td>
<td>20%</td>
<td>11%</td>
</tr>
<tr>
<td>5 Yr</td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td>10 Yr</td>
<td>100%</td>
<td>6%</td>
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</table>

*Shareholder return is excluding dividend

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<thead>
<tr>
<th></th>
<th>CIL share price</th>
<th>Sensex</th>
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<tr>
<td>2000</td>
<td>75</td>
<td>5,205</td>
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<tr>
<td>2006</td>
<td>178</td>
<td>9,920</td>
</tr>
<tr>
<td>Jan-09</td>
<td>168</td>
<td>9,424</td>
</tr>
<tr>
<td>Jun 10</td>
<td>553</td>
<td>16,667</td>
</tr>
</tbody>
</table>
Delivering on Commitments

- **Strong balance sheet**
  - Debt to capital: 5.4%
  - Cash & Equivalents: Rs. 789 Cr

- **Grew our business**
  - Sales growth (CAGR): 14%

- **Returned value to shareholders**
  - Return on equity: 31%
  - Share appreciation: 103%
  - Dividends: Rs. 238 Cr

*Pertains to FY0910*
CIL - Return on Net Assets

ROANA

- 2004-05: 20%
- 2005-06: 23%
- 2006-07: 27%
- 2007-08: 26%
- 2008-09: 33%
- 2009-10: 29%
Index

- Where have we been?
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  - Strategic Direction : Product Plan
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The Way Forward

- Surrounding The Customer With One Face
- Innovative, Cost Effective, Relevant & Dependable Solutions
- Tightly Integrated Legal Entities
- Aligned with Cummins Vision and Core Values
Greatness – Zero Defect Companies

Cummins Values:
Integrity, Delivering Superior Results

Brand Promise:
Dependability

Excellence:
Good to Great

Quality Goal:
Continuous improvement towards **defect free** processes that satisfy customer needs and achieve business results

- The Leadership Team has delivered and is a trustworthy steward of Cummins assets
- India is a great market albeit with significant complexities
- Well integrated with Corporate and Global BUs allowing for balanced decisions
- We have now earned the right to aspire to become ‘Zero Defect’ companies
India ABO Strategy

- Domestic Market Share Leadership
- Low Cost Producer
- Exports
- Great Place To Work
Corporate Responsibility

Three focus areas:

- **Higher Education**
  - Funded new Mechanical Engineering course at the Cummins College of Engineering for Women.
  - Enrollment of 2\textsuperscript{nd} batch of students underway
  - Cummins Scholarship – 30 meritorious economically /socially disadvantaged students for undergraduate degrees and diplomas. Doubled since last year
  - Agreed to partially fund Cummins College of Engineering for Women, Nagpur

- **Energy & Environment**
  - Cummins Lab at IIT-Bombay for alternative fuel research
  - Agreement with Indian Institute of Science (IISc) to commercialize Producer Gas power generation systems
  - Initiated Six-Sigma project on Waste Management
  - Launched Pilot Rural Electrification Project in a village in Orissa

- **Local Community Infrastructure Development**
  - Poona School and Home for Blind Girls
  - JaaGo Re - Voter restriction drive across ABO entities
  - Closely working with Public Concern for Governance Trust on Right to Information
  - Watershed Management Project at BVJSS
  - NGO’s catering to needs of abandoned and orphaned children – Aapla Ghar, Wagholi school (BVJSS), Senahalaya
One Cummins Strategy : Megasite

Megasite Rationale

- Support Cummins growth plans in India
- Space exhausted at the Kothrud Campus in Pune
- Reactive case by case expansions leading to
  - Small size with limited expansion scope
  - Scattered facilities (based on immediate availability)
  - Higher costs
- Need to facilitate expansion & co-location –lower costs
- Supports the ‘One Cummins’ brand strategy
Megasite Plan

Expansion plans at Megasite

**Domestic**
- TCL-2
- ReCon
- HHP Rebuild
- PDC
- PGBU
- B Uplift & BPI

**SEZ**
- ReCon
- PGBU
- HHP EBU Facility

[Image of construction site with machinery]
CIL is a Profitable **Growth** Story

- Proven track record
- Positioned well to capture growth
- Growing profits faster than sales
Industrial Engine Business Overview
Cummins Product Family

- Complete Product Range 31 - 3500HP
- Common Electronic Controls
- Common Maintenance Practices
- Supported by Cummins Distributors

Product

- QSK78
- QSK60
- K50
- QSK45
- Q58
- QST30
- QSK23
- QSK19
- QSK15
- QSM11/M11
- C8.3/QSC8.3
- B5.9/QSB5.9
- B3.9
- B3.3
- A Series

Horsepower

31 HP A Series
### Manufacturing facilities: IEBU

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>OPERATIONS</th>
<th>AREA – BUILT-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Kothrud, Pune</td>
<td>Engine Mfg. - N14 /NT, K19, V28, K38/50, Quantum series</td>
<td>51439 m²</td>
</tr>
<tr>
<td>II Nagar Road, Pune</td>
<td>“C” series assembly</td>
<td>5492 m²</td>
</tr>
<tr>
<td>III Loni</td>
<td>‘B’ Upfit, Industrial</td>
<td>1579 m²</td>
</tr>
</tbody>
</table>

I – Kothrud, Pune

II - Nagar Road, Pune

III - Loni
Markets We Serve

- Mining
- Construction
- Compressor
- Gas Compression
- Rail
- Marine
- Oilfield
- Defense
- Pumps
Construction

- **Market Definition:**
  - 50 HP to 300 HP Diesel powered Construction Machinery, Earthmoving Equipments & Material Handling Equipments such as Crawler Excavators, Wheel Loaders, Backhoe Loaders, Compactors, Motor Graders, Dozers, Fork lift trucks, Cranes etc.

- **Key Segments:**
  - Roads, Bridges, Rail, Ports, Airports, Irrigation & Power, Defence (DGBR), Granite & Marble Mines, Stone Quarries

- **Key OEMs in the market:**
  - Telcon, L&T-Komatsu, JCB, Hyundai, Volvo, CAT, TIL, TWL, Vectra (VAE), Dynapac, LiuGong, Schwing Stetter, Wirtgen, L&T Case, Terex Vectra, Greaves, Escorts, ACE etc.

- **Major Customers:**
  - DGBR, Major contractors like L&T ECC, Punj Lloyd, Jaiprakash, HCC, Gammon, etc
  - Marble & granite customers like R K Marbles, J K Marbles, GEM Granites, etc.
  - Cement customers like ACC, Ambuja Cement, Lafarge, Ultratech, Shree Cement, etc
Construction Product Portfolio

Crawler Excavators

Compactors

Skid Steer Loaders
Mining

- **Market Definition:**
  - Diesel powered earthmoving equipments used in Mining eg. Dumpers, Excavators/Shovels,
  - Dozers, Loaders, Graders, Surface Miners, Blast Hole Rigs and other support eqpt. like
  - Water Sprinklers, Tyre Handlers, Coal Haulers, Pipe Layer, Cranes, FE Loaders etc.
  - Includes OEM, R&R (Replacement and Repowering)

- **Key Segments:**
  - Coal, Lignite, Steel, Cement, Other Minerals (Bauxite, Zinc, Copper) etc.

- **Key OEMs in the market:**
  - Domestic: BEML, CAT, Telcon, Revathi, L&T- Kansbahal, L&T Komatsu, TWL, Volvo etc.
  - Global: Komatsu, Euclid-Hitachi, Unit Rig / Terex, Liebherr, O&K etc.

- **Major Customers:**
  - Coal India subsidiaries, SECL, NLC, TISCO, SAIL, HCL, HZL, KIOCL, NMDC, Cement Industries & Private contractors like EMTA, G S Atwal etc.
Mining Product Portfolio

- **Excavators**
- **Surface Miner**
- **Dump Truck**
- **Dump Trucks - 35T, 50/60T, 100T, 120T, 190T, 240T**
- **Dozer**
Water Well Rigs

- **Market Definition:**
  - Diesel powered Screw Compressors (450 -1400 cfm /150 - 500 psi) for Water Well Rigs

- **Key Segments: Water Well Drills / Bore wells for:**
  - Agricultural / Irrigation
  - Rural and urban drinking water supply
  - Institutional / Commercial – Infrastructure, Industries, Coal Mines, etc.

- **Key OEMs:**
  - Elgi Equipments, Atlas Copco, Kirloskar Pneumatic, Revathi Equipments, Doosan

- **Major Customers:**
  - Private Water Well Drilling Rig owners
  - Rig manufacturers
  - Central Ground Water Board / DGS&D
  - State Agencies like Public Health Engg Dept, Water supply and Sewerage Board, Ground
  - Water Survey, Development Agencies and Minor Irrigation department
Portable Compressors

- **Market Definition:**
  - Diesel engine powered Portable Screw Compressors (180 – 600 cfm /100 - 300 psi)

- **Key Segments:**
  - Construction (Roads / Ports / Infrastructure / Granite / Marble / Quarries) - Portable Compressors
  - Coal / Iron Ore / Limestone – Crawler mounted portable packs

- **Key OEMs:**
  - Atlas Copco India Ltd.
  - Doosan
  - Elgi Equipments Ltd.
  - Kirloskar Pneumatic Company Ltd.

- **Major Customers:**
  - DGBR / Major Construction Contractors - L&T-ECC/Punj Lloyd/Gammon India/ Jaiprakash
  - Major Mining / Steel Customers - Coal India Ltd. / TISCO / EMTA / HZL / SAIL
  - Cement – ACC / Gujarat Ambuja / Grasim
  - Major Marble and Granite customers - R K Marbles, GEM granites, Pokarna Granites
Water Well Rigs & Portable Compressors

Water Well Drill Rigs

Portable Compressors
Rail

- **Market Definition:**
  - Diesel Engines / Value Packages for self propelled rail vehicles, locomotives, track maintenance machines and power cars.

- **Key Segments:**
  - Main Line / Shunting Locomotives, Diesel Multiple Units, Departmental Vehicles (tower cars, rail cranes, accident relief tool vans etc.), Power Cars (EOG), Track Machines

- **Key OEMs:**
  - ICF Chennai, RCF Kapurthala, Plasser Faridabad, BHEL Bhopal & Jhansi, SAN Bangalore, DLW, Phooltas…

- **Major Customers:**
  - Indian Railways, Steel, Cement, Thermal Power, Fertilizer plants, Port Trusts etc.
Rail

- Power Car
- Shunting Loco
- Track Maintenance
- HHP DEMU
- Overhead Equipment Inspection Car
Marine

- **Market Definition:**
  - Main Propulsion Diesel Engines for powering Bollard Pull Tugs, Barges, Ferries, Pilot Launches, Fishing Trawlers.
  - Auxiliary DG sets for Warships, Frigates, Fast Attack Vessels, Patrol Vessels, Carrier Vessels etc.

- **Key Segments:**
  - Indian Navy, Coast Guard, Commercial Marine and Fishing Trawlers

- **Key Shipyards:**
  - GRSE, Goa Shipyard, Sesa Goa, ABG Shipyard, Bharati Shipyard, Tebma, Mazagon Docks, Chowgule & Co., Dempo Shipping, Vipul Shipyards, West Coast Shipyards, Cochin Shipyard

- **Major Customers:**
  - Indian Navy, Coast Guard, IWAI, ONGC, Barge Owners, Fishing Trawler owners, Shipping companies
Marine

Naval Ships

Fishing Trawlers

INS Tarangini

Iron Ore Barge

FAC - Fast Attack Craft
Pump

- Market Definition & Key Segments: Engine Driven Pumps for:
  - Emergency Duty - Fire fighting pumps
  - Continuous Duty - Irrigation, Mine de-watering, Booster Application, Blast Furnace & Cooling tower - Concrete Pumps

- Key OEMs:
  - Kirloskar Brothers, Mather & Platt Pumps, Voltas, WPIL, Beacon Wier, Flowmore, Punj Llyod

- Major Customers:
  - Refineries (IOCL, BPCL, HPCL, CPCL, Reliance, Essar),
  - Multipurpose Chemical Terminals (IOCL, BPCL, HPCL, Reliance, IOTL)
  - Ports (Kolkata Port Trust, Mumbai Port Trust, Vizag Port Trust, CPT etc)
  - Steel Majors (TISCO, Jindal, Bhushan, SAIL), Power Plants (NTPC, NPCIL, TATA Power, PGCIL)
Pump

Irrigation Pump
Oilfield

- **Market Definition:**
  - Diesel Engines for Oil field Equipment like AC-SCR Drill Rigs, Work over Rigs, Cementing Units, Mud Pumps, COD Pumps, Gas Engines for pump application (for transportation of crude oil)

- **Key Segments:**
  - AC-SCR deep drilling rigs, Work Over Rigs etc.

- **Key OEMs:**
  - Jiva International, John Energy, Ramsharan & Co., BHEL, BPCL

- **Major Customers:**
  - ONGC, Oil India Limited
Oilfield

Electric Driven Drill Rig (AC-SCR Onshore Rig)

Hydro Frac Unit

Mechanical Mobile rigs
## Emission Norms in India

<table>
<thead>
<tr>
<th>Category</th>
<th>Proposed date of implementation</th>
<th>NOx</th>
<th>HC</th>
<th>CO</th>
<th>PM</th>
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</thead>
<tbody>
<tr>
<td>18 - 37 kW</td>
<td>August - 2002</td>
<td>18.0</td>
<td>3.5</td>
<td>14.0</td>
<td>-</td>
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<tr>
<td>37 - 75 kW</td>
<td>August - 2002</td>
<td>18.0</td>
<td>3.5</td>
<td>14.0</td>
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<tr>
<td>75 - 130 kW</td>
<td>August - 2002</td>
<td>18.0</td>
<td>3.5</td>
<td>14.0</td>
<td>-</td>
</tr>
<tr>
<td>130 - 560 kW</td>
<td>August - 2002</td>
<td>18.0</td>
<td>3.5</td>
<td>14.0</td>
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### INDIA STAGE II

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<th>NOx</th>
<th>HC</th>
<th>CO</th>
<th>PM</th>
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<tbody>
<tr>
<td>18 - 37 kW</td>
<td>April - 2007</td>
<td>9.2</td>
<td>1.3</td>
<td>6.5</td>
<td>0.85</td>
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<td>37 - 75 kW</td>
<td>April - 2007</td>
<td>9.2</td>
<td>1.3</td>
<td>6.5</td>
<td>0.85</td>
</tr>
<tr>
<td>75 - 130 kW</td>
<td>April - 2007</td>
<td>9.2</td>
<td>1.3</td>
<td>5.0</td>
<td>0.70</td>
</tr>
<tr>
<td>130 - 560 kW</td>
<td>April - 2007</td>
<td>9.2</td>
<td>1.3</td>
<td>5.0</td>
<td>0.54</td>
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### INDIA STAGE III

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<tr>
<td>18 - 37 kW</td>
<td>April - 2011</td>
<td>7.5</td>
<td>5.5</td>
<td>0.6</td>
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<tr>
<td>37 - 75 kW</td>
<td>April - 2011</td>
<td>4.7</td>
<td>5.0</td>
<td>0.4</td>
</tr>
<tr>
<td>75 - 130 kW</td>
<td>April - 2011</td>
<td>4.0</td>
<td>5.0</td>
<td>0.3</td>
</tr>
<tr>
<td>130 - 560 kW</td>
<td>April - 2011</td>
<td>4.0</td>
<td>3.5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

- India stage II is now known as Bharat Stage-II (BS-II).
- India stage II based on EU stage I was implemented in October 2007.
- India stage III emission norms based on EU stage IIIA likely to be implemented from April 2011.
Segment wise trends of each market, major Growth drivers & Strategic initiatives

- As India’s economy grows over the next 5 to 10 years, the nation will have to invest more and more for the development of its infrastructure as well as other supporting industries since high growth trajectory needs ramped up infrastructure.

- Construction equipment industry will be the largest beneficiary of the private & government spending on infrastructure development.

- India stage III emission norms based on EU stage IIIA likely to be implemented from April 2011 on Off Highway Wheeled Construction Equipments such as wheel loaders, skid steer loaders, motor graders, compactors, pavers and cranes.

- Apart from offering the global range of emission compliant electronic engines by leveraging on its global emission leadership, Cummins is also developing mechanical recipe for emission compliant engines in 5.9 litres & 3.9 litres.
Trends, Growth drivers & Initiatives

- Demand supply gap in power sector and growth in Steel & Cement sector will fuel the demand for Mining of Coal, Iron Ore, Lignite.
- This will not only increase the demand for mining equipments but also improve business prospects for Shunting and Freight Locomotives.
- There is a growing demand of electronic engines in the mining segment.
- Cummins is well positioned to offer its complete range of quantum series (electronic) engines in the mining & other segments, support OEM’s in various new application launches, drive the TCO concept together, enhance the value proposition in terms of cost efficiency and faster deliveries.
- We are working on delivery lead time improvement through Customer Focused Six Sigma (CFSS) projects.
Trends, Growth drivers & Initiatives

- There is a consistent and structured demand for diesel engines (DG Sets) from Indian Navy and coastguard in High Horse power range. Re-fits of old vessels by Indian Navy also offers opportunities for Cummins engines.

- The high pressure water well drill rig market (though cyclical) showed significant increase in demand last year mainly due to deficient and irregular monsoon around the country.

- Govt. directive to use clean fuel in all major cities of India in a phase manner is leading to increased demand for Gas compression packages.

- Cummins’ strengthened its position in this segment by offering competitive products having higher fuel efficiency with lowest life cycle cost and bagged major orders from leading Gas Compression package manufacturers.
Strategic Initiatives

- Leveraging indigenous 3.3 litre engine to penetrate into light construction market
- Capturing new initiatives in High Horse Power applications in Rail & Marine segment and timely execution of current projects in hand.
- Partnering with key strategic OEM’s to capture new opportunities in defense segment for off highway application.
- Partner & grow business with doemstic and global construction equipment manufacturers like Telcon (Tata-Hitachi JV), Hyundai, JCB, LiuGong, Wirtgen, Metso, Schwing Stetter and other OEM’s expanding or establishing manufacturing base in India.
- Support domestic OEM’s export initiatives by leveraging Cummins International distributor network / channel.
Challenges

- Growth figures in last few quarters suggest that the road to recovery is clear ahead but not everything can be termed so easy. Industry is yet to recover completely and it is still in a vulnerable state.

- For growth to continue, sustained reforms by the government are crucial. Active investment in future is the only way to make sure that any economic jolt in the future does not put the industry into a crisis again.

- Growth has its own set of challenges. The biggest risk which could counter India’s growth momentum is inflation.

- If inflation becomes more widespread, it may force RBI to raise the rates much more aggressively than expected.

- The increased cost of financing could dampen the industrial activity.

- Commodity costs are likely to increase in coming quarters and may put pressure on margins.
Power Generation Business Overview
Cummins Strategy

Four Macro Trends Continue to Drive Sustainable Growth

- Emission Standards
- Price & Availability of Energy
- Globalization
- Infrastructure Growth

CMI Growth
Opportunities

- Infrastructure Gap
- Gas Availability
- Emissions
- Growth Areas
India Overview

- Infrastructure gap due to high growth, poor planning, and execution drives power generation equipment market
  - GDP growth of 7-9%
  - 12-16% gap between peak power demand and capacity

- Prime market
  - Average operating hours of ~500 year

- Key success factors of Commercial Diesel and Gas markets
  - Operating Expense: Fuel economy, spare parts pricing, oil change and service intervals, overhaul period
  - Service and parts availability
  - Lead-time and availability
  - Pricing
## India vs China

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchasing Power Parity</td>
<td>$ 3.56 Tr</td>
</tr>
<tr>
<td>2</td>
<td>GDP</td>
<td>$ 1.095 Tr</td>
</tr>
<tr>
<td>3</td>
<td>GDP -real growth rate</td>
<td>7.40%</td>
</tr>
<tr>
<td>4</td>
<td>GDP composition by Top 3 sectors (2009 est)</td>
<td>Agri-17.5 % , Industry -20% Services - 62.6%</td>
</tr>
<tr>
<td>5</td>
<td>Population (July 09 est)</td>
<td>1,166,079,217</td>
</tr>
<tr>
<td>6</td>
<td>Labor Force</td>
<td>467 Mn</td>
</tr>
<tr>
<td>7</td>
<td>Unemployment rate</td>
<td>10.70%</td>
</tr>
<tr>
<td>8</td>
<td>Population below poverty line (2007)</td>
<td>25%</td>
</tr>
<tr>
<td>9</td>
<td>Inflation rate ( consumer prices)</td>
<td>10.70%</td>
</tr>
<tr>
<td>10</td>
<td>Industrial Production Growth rate</td>
<td>4.80%</td>
</tr>
<tr>
<td>11</td>
<td>Electricity Production</td>
<td>723.8 Bn kWh</td>
</tr>
<tr>
<td>12</td>
<td>Reserves of FE &amp; Gold</td>
<td>$287.5 Bn</td>
</tr>
<tr>
<td>13</td>
<td>Debt external</td>
<td>$ 223.9 Bn</td>
</tr>
</tbody>
</table>


India is approaching population of China but produces only 1/5th the Power
Power trends: historical & current shortages

Peak power shortages of 12 – 16% since 2002
Capacity Additions – historical and current

Project execution gaps of > 10%

- Govt will miss plan for March 2012 (78,000 MW).
- Shortfall expected to be 7-8000 MW.
- Likely to be higher as only 57,000 MW of power projects are certain to be completed.
Capacity shortfall of 80-140 GW by 2017

**Generation capacity***

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>240-265</td>
<td>25-45*</td>
<td>100-120**</td>
<td>80-140</td>
</tr>
</tbody>
</table>

* Out of 25 GW, 16.5 is thermal which is based on PFC loan list; out of 45 GW, 36 is thermal which is based on actual plant-by-plant analysis (ones which have ordered/started construction of boilers are taken in additions)

** Best Case scenario; assuming all current equipment manufacturing capacity is running flat out

Source: CEA; Planning Commission; Literature search; Company websites; McKinsey analysis
Leading to peak deficit of 40 GW by 2017

<table>
<thead>
<tr>
<th></th>
<th>Demand</th>
<th>Available Supply</th>
<th>Demand</th>
<th>Available Supply</th>
<th>Demand</th>
<th>Available Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 Jan</td>
<td>132</td>
<td>53</td>
<td>109</td>
<td>27</td>
<td>79</td>
<td>82</td>
</tr>
<tr>
<td>2012</td>
<td>190</td>
<td>108</td>
<td>148</td>
<td>31</td>
<td>129</td>
<td>171</td>
</tr>
<tr>
<td>2017</td>
<td>300</td>
<td>171</td>
<td>256</td>
<td>54</td>
<td>202</td>
<td></td>
</tr>
</tbody>
</table>

* Including captive
Source: Planning Commission; McKinsey analysis
5 - 10X scale up required in capacity addition

<table>
<thead>
<tr>
<th>Annual capacity addition</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW per year</td>
</tr>
</tbody>
</table>

- 1997-2002: 4 GW (target: 8) X plan actuals
- 2002-2007: 4 GW (target: 8) X plan actuals
- 2017-2027 requirement: 40-50 GW

* Assuming required capacity of 415-440 GW by 2017, GDP growth of 8% and electricity elasticity of 1.5

Source: CEA, Planning Commission, McKinsey analysis
Power price escalates therefore increasing demand for gas in continuous applications

- Power generated from Diesel has become increasingly costlier than utility or gas.
- Consequently running hours of diesel generators have reduced.
## Market Size by segment - 2009

<table>
<thead>
<tr>
<th>Market</th>
<th>Units</th>
<th>MW</th>
<th>Market size $M USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel generators</td>
<td>138,300</td>
<td>7,131</td>
<td>1,114</td>
</tr>
<tr>
<td>15-2500 kVA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean Burn generators</td>
<td>100</td>
<td>135</td>
<td>38</td>
</tr>
<tr>
<td>Stoic generators</td>
<td>170</td>
<td>20</td>
<td>4.5</td>
</tr>
<tr>
<td>Producer Gas</td>
<td>16</td>
<td>3</td>
<td>2.32</td>
</tr>
<tr>
<td>ATS</td>
<td>1500</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>RTPFC</td>
<td>1000 kVAR</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>1,170</strong></td>
</tr>
</tbody>
</table>
Gas Opportunity

- **Overall Industry**: Market revival seen. Manufacturing, Realty, Services, Telecom continue to grow.

- **Spark Spread** – High diesel cost driving gensets to standby. Increased gas availability and relative pricing will increase diesel substitution / create new opportunities. However with gas pricing @ 8 – 10 $/mmbtu, CHP applications will increase.

- **Natural Gas** – Increased availability & 800-1000mw market over next 5 years.

- **New gas finds by Reliance, GSPCL (10 Trillion), LNG terminals & enhanced capacity** Commercial availability in end 2009 & onwards.

- **Coal bed methane RIL (Reliance), Central India, Rajasthan state (West) – 3.65 TcF** Commercial availability from 2010 onwards offers additional / alternate avenue for business.

- **Renewable Energy & Rural electrification** - Producer Gas business opportunity showing signs of improvement. Focus around Power Cos & small IPPs.

---

**Assumptions**

<table>
<thead>
<tr>
<th></th>
<th>$ = Rs.</th>
<th>€ = $</th>
<th>Rs./ Liter</th>
<th>35.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel Cost</td>
<td></td>
<td></td>
<td>Rs./ Liter</td>
<td>35.0</td>
</tr>
<tr>
<td>Gas Cost</td>
<td>$ / mmbtu</td>
<td>30.0</td>
<td>4.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Gas Cost</td>
<td>Rs. / M³</td>
<td>18.0</td>
<td>3.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Diesel Fuel economy</td>
<td>Units / Liter</td>
<td>3.9</td>
<td>3.9</td>
<td>10.0</td>
</tr>
<tr>
<td>Gas Fuel economy</td>
<td>Units / M³</td>
<td>3.7</td>
<td>3.7</td>
<td>10.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Rs / kwh</th>
<th>Cents / kwh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid Cost</td>
<td>4.5</td>
<td>9.3</td>
</tr>
<tr>
<td>Diesel Generation Cost on Diesel</td>
<td>9.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Generation Cost on Gas</td>
<td>4.9</td>
<td>10.0</td>
</tr>
</tbody>
</table>
## India Gas Market: Potential in Power Sector

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Gas availability MCM/yr</strong></td>
<td>37,874</td>
<td>36,861</td>
<td>52,407</td>
<td>84,815</td>
<td>92,469</td>
<td>99,360</td>
</tr>
<tr>
<td><strong>Allocation for power generation %</strong></td>
<td>40%</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>42%</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Gas available for power gen MCM/yr</strong></td>
<td>15,149</td>
<td>15,113</td>
<td>21,487</td>
<td>34,774</td>
<td>38,837</td>
<td>41,731</td>
</tr>
<tr>
<td><strong>Utilities &amp; IPPs %</strong></td>
<td>81%</td>
<td>80%</td>
<td>85%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td><strong>Captive Power %</strong></td>
<td>19%</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Captive Power Gas Consumption MCM/yr**

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equivalent Gas Power Capacity@ 90% PLF, 92% Avl, 39% MW</strong></td>
<td>1526</td>
<td>1603</td>
<td>1709</td>
<td>1844</td>
<td>2059</td>
<td>2301</td>
</tr>
<tr>
<td><strong>Electrical Efficiency</strong></td>
<td>1394</td>
<td>1526</td>
<td>1603</td>
<td>1709</td>
<td>1844</td>
<td>2059</td>
</tr>
<tr>
<td><strong>Existing Gas Power Plant Capacity MW</strong></td>
<td>133</td>
<td>76</td>
<td>106</td>
<td>135</td>
<td>215</td>
<td>242</td>
</tr>
<tr>
<td><strong>Incremental Capacity Addition (Gas Market Size) MW</strong></td>
<td>2878</td>
<td>3023</td>
<td>3223</td>
<td>3477</td>
<td>3884</td>
<td>4340</td>
</tr>
</tbody>
</table>

**Source: 11th Plan Gas Report**

**Reduction in 2007 & 2008 – No increase in Gas Qty. at Petronet & Shell LNG Terminals as planned**
Gas Supply & Pricing

- Gas companies have 100% allocations contracted to users where gas price is $ 5.50 to $ 7.25 mmBTU under long term back to back agreements.
- New supply only by spot purchase of LNG but costly ($14 to 28 mmBTU)
- However, Gas pricing now stabilizing around $8 to $10 /mmBTU (Rs 16 to 18 / m3).
- Reliance KG basin gas production commenced is planned to reach 80 mmscmd in 2010, currently 40 mmscmd has been achieved or a 17% increase in gas supplies.
- Regulators still not fully on board to decide pricing and distribution.
- Coal Bed Methane still under exploratory stage. Being used largely for self consumption. Currently at 0.2 mmscmd and expected increase to 5 mmscmd by 2013 based on internal survey (official figures state 7.8 mmscmd). Commercial availability likely this year.

mmscmd – Metric Million Standard Cubic Meters per Day
mmBTU – Metric Million British Thermal Units
Cummins Lean Burn NatGas product line

1500 rpm, 50Hz

**NOTE:** All HHP Lean Burn Natural Gas Gensets are rated at Continuous Output Power (COP).

- 2000 GQNC 2000 kWe
- 1750 GQNB 1750 kWe
- 1540 GQNA 1540 kWe
- 1400 GQKC 1400 kWe
- 1160 GQKA 1160 kWe
- 315 GFBA 315 kWe
- 575 GQKA 575 kWe

Currently available for Grid paralleling. Needs application / load study for island mode.
Cummins Producer Gas Product line

NOTE: All Producer Gas Gensets are rated at Continuous Output Power (COP).

50Hz Product Line

- GTA855G 120 kWe
- GTA1710G 240 kWe
- QSK38 LB 500 kWe (Under Dev)

500kWe

25 kWe 75 kWe 150 kWe 240kWe 500kWe
Redundant Power Gen Products in Red

Commercial LHP and HHP – Prime: 7.5 - 3000 kVA

- X Series 7.5 to 25 kVA
- S Series 30 to 62.5 kVA
- B Series 82.5 to 140 kVA
- N Series 320 kVA to 380 kVA
- V28 600 & 625 kVA
- K19 500 kVA
- K38 750 & 1000 kVA
- QSK78 3000 kVA
- QSK60 1875 & 2000 kVA
- K50 1250 & 1500 kVA
- N Series 380 kVA 250 kVA
- C series 250 kVA
- C series 160 to 200 kVA
- B Series 82.5 to 140 kVA
- S Series 30 to 62.5 kVA
- X Series 7.5 to 25 kVA
Growth Area – Low Horse Power Generators

- Small
- Quiet
- Efficient
- Low weight
- Easy handling
- Easy installation
Sub 12 KW distribution channel

- PGBU
  - CSS
    - Super Distributors 5 nos
  - GOEM
    - GOEM Dealers 70 nos
    - National/Telecom & institutional
    - Retailers 350 nos
    - END CUSTOMER

Retail
Distribution Business Overview
Agenda

- Introduction to India DBU
- Business Demographics
- DBU Key Sector Growth Potential
- Key Initiatives
India DBU Vision and Mission

Provide superior and excellent Service, Value packages, customised Solutions and Products that enable the uptime of our Customers’ Assets ..... 

...... thereby making people’s lives better by unleashing the Power of Cummins.`

- Dependable products
- Dependable service
- Dependable programs
- Dependable people

We do what we say we will do
India DBU today

- All India Footprint
- 570 employees
- ‘Best in class Service Network’:
  - 4 Zonal Offices
  - 19 Area Offices
  - 44 Dealerships
  - 212 Dealer Branch offices
  - 7 Depots
  - 1 Parts Mother Warehouse
  - 1 Recon/Repair Centre
- >2000 Trained Engrs & technicians
- Supporting 200,000+ engines with & 70,000+ customers
- 40 years of Experience & Expertise
Markets We Serve

- Mining
- Oil & Gas
- Marine
- Compressor
- Agriculture
- Automotive
- PowerGen
- Railway
- Defence
Key Customer segments

Market-wise sales revenue

- 39% - Oil & Gas
- 39% - Mining
- 21% - Realty/resi
- 10% - Mfg Agro
- 3% - Mining
- 3% - Mining
- 3% - Mining
- 3% - Mining
- 2% - Mining
- 2% - Mining
- 2% - Mining
- 0% - Mining

- Mfg Textile
- Telecom/IT/ITES
- Mfg (Pharma Chem & Discreet)
- Water-well rigs + Compre
- Marine
- Defence
- Const + Pumps
- Agriculture
- Auto
Our Esteemed Customers

To name just a few…
DBU Key Economic Sector Growth & Opportunities

- **Mining**
  - Total mining increased at the CAGR of 7.68% during the 2000 to 2009 period. Coal mining increased at 6.91%, iron ore at the rate of 12.14% and limestone at the rate of 6.24% during the same period.
  - Growth in coal production in India is expected to be at 8% CAGR for next five years.

- **Power Generation**
  - Total installed capacity of power at the end of Feb 2010 stands at 158 GW.
  - Normal power deficit and peak power deficit stands at 10.1% and 12.6% in February 2010.
  - Next two fiscal years 2010-12 it is expected that Indian power industry will add 40 GW of additional capacity.

- **Railways**
  - Roadmap for growth of Indian Railways (by 2020) – it is planned to add 2.9 lakh wagons, over 5000 diesel locomotives, over 4000 electric locomotives and 50,000 coaches in the next decade.
  - Indian Railways’ revenue earnings have increased by 8.56 per cent to US$ 15.30 billion during April 2009-January 2010, compared to US$ 14.09 billion during the same period last year.
  - Total earnings from goods traffic went up by 8.47 per cent to US$ 10.36 billion during April 2009-January 2010 from US$ 9.55 billion during the same period last year.

- **Oil & Gas**
  - Peak oil concept widely accepted albeit with some reservation - NG exploration picking up to find a non-renewable substitute fuel (ONGC added 83 million tonnes of oil and gas reserves in 2009-10).
  - NG production picking up with extraction from KG basin.
  - NG pipeline reaching to southern and eastern states of India opening up a whole new market for the NG products.

**Source:**
- Ministry of mines, Railways, Oil & Gas (Govt of India); [http://www.ibef.org/industry/oilandgas.aspx](http://www.ibef.org/industry/oilandgas.aspx)
Based on the earlier sectoral trends, robust auto market, strong service sector performance esp. telecom and investments in the infrastructure, segments, above growth trends are expected to continue.
Key Initiatives -

- **Improve Customer Support Excellence**
  - Service Delivery Process/Structure Revamp

- **Enhancing Customer Value**
  - Key Account Mgmt, Cummins ‘Value’ AMCs and Six Sigma

- **Focus on growth**
  - Expand Service Solutions
  - Push Consumer Business Entry
  - HHP Rebuild Centre
  - DOEM Business
Key Initiatives -

- **Capability building**
  - Improve Training Infrastructure and Manpower
  - Enhance ‘New’ Technology skill levels.
  - Develop Dealers

- **Focus on Efficiency Improvements**
  - Revamp Internal processes
  - Right size and Right position
  - Improved Working Capital Management
  - Reduce Operational costs

- **People Engagement**
Thank you!