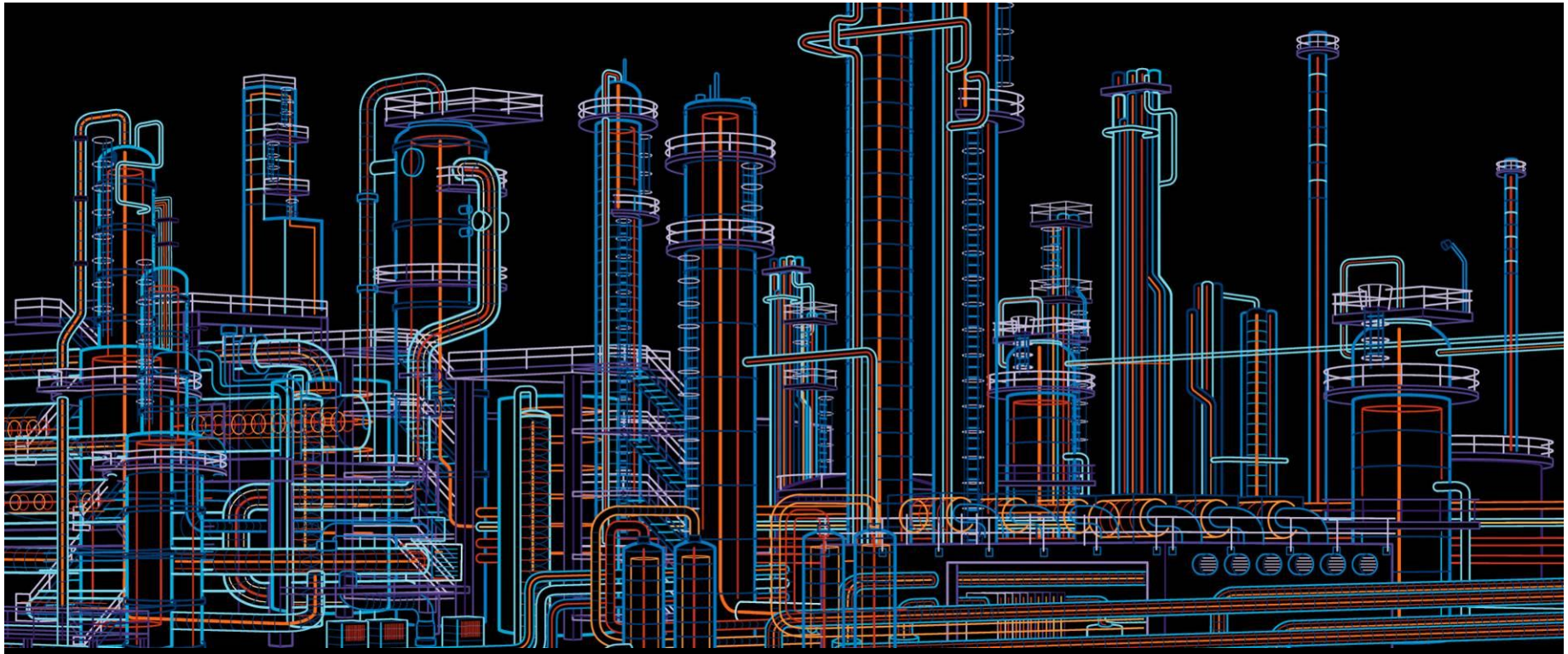


Subir Pal, October 17th 2013, Nashik

ABB India, Analyst meet 2013
Market outlook

Safe-harbor statement

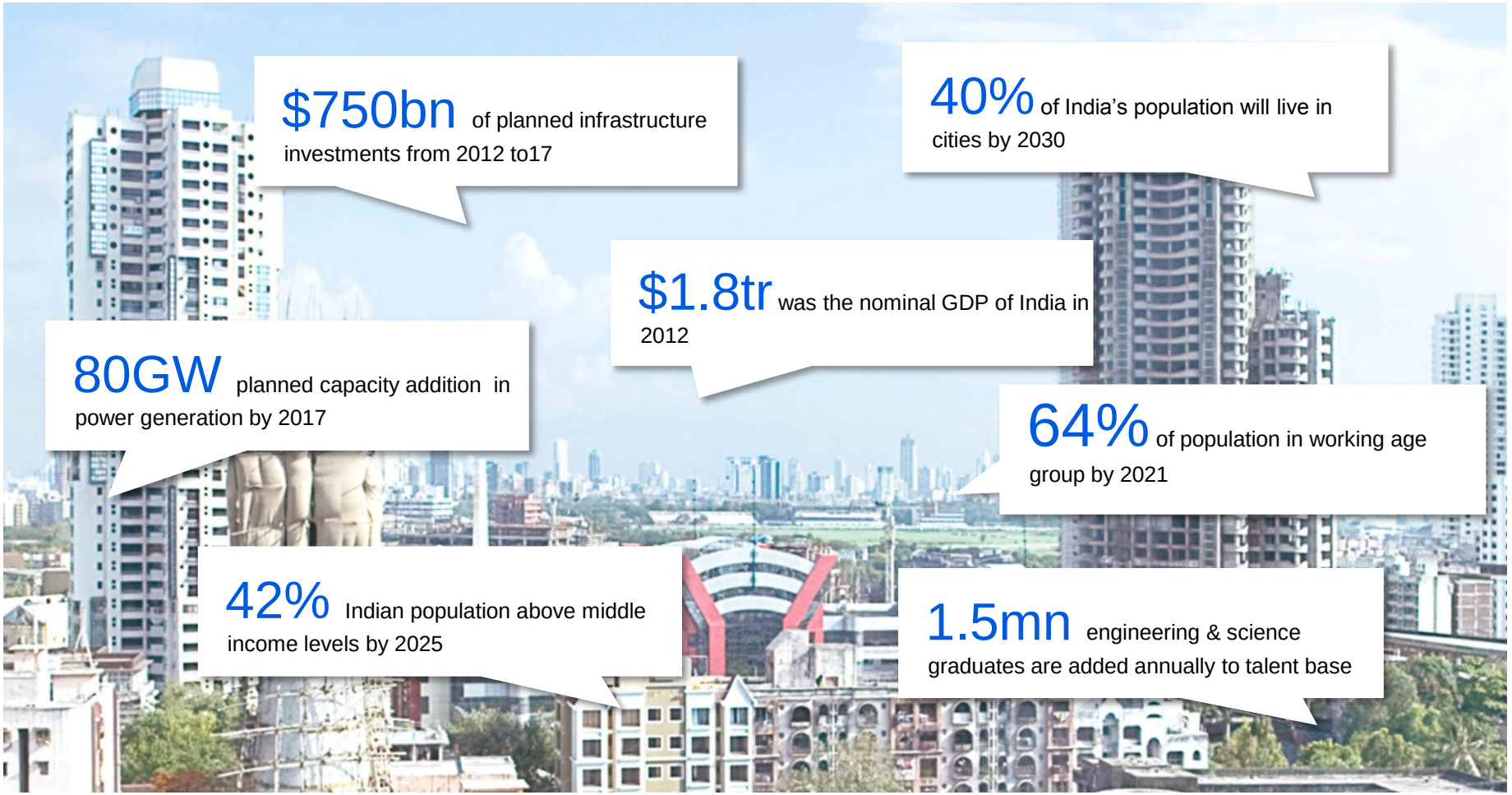
This presentation includes forward-looking information and statements including statements concerning the outlook for our businesses. These statements are based on current expectations, estimates and projections about the factors that may affect our future performance, including global economic conditions, and the economic conditions of the regions and industries that are major markets for ABB Ltd. These expectations, estimates and projections are generally identifiable by statements containing words such as “expects,” “believes,” “estimates,” “targets,” “plans,” “outlook” or similar expressions.

There are numerous risks and uncertainties, many of which are beyond our control, that could cause our actual results to differ materially from the forward-looking information and statements made in this presentation and which could affect our ability to achieve any or all of our stated targets. The important factors that could cause such differences include, among others:

- business risks associated with the with the volatile global economic environment and political conditions
- costs associated with compliance activities
- raw materials availability and prices
- market acceptance of new products and services
- changes in governmental regulations and currency exchange rates and
- such other factors as may be discussed from time to time in ABB Ltd’s filings with the U.S. Securities and Exchange Commission, including its Annual Reports on Form 20-F.

Although ABB Ltd believes that its expectations reflected in any such forward-looking statement are based upon reasonable assumptions, it can give no assurance that those expectations will be achieved.

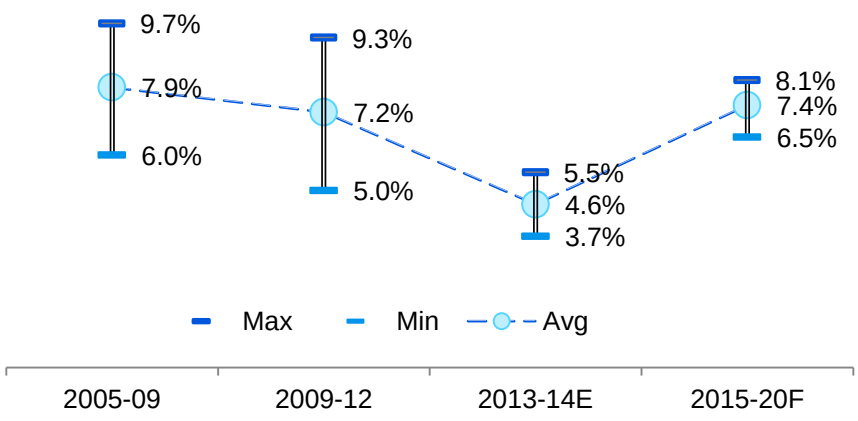
India
Long term growth drivers



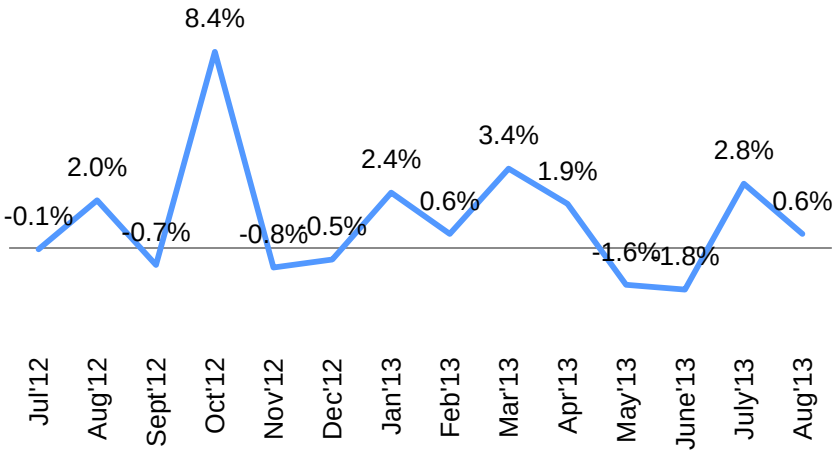
Source: Planning Commission, United Nation – HDI 2011, Harvard: report: Population dynamics in India, OECD report – The emerging middle class in developing countries , NASSCOM- Knowledge Base, World Bank Data

Economic Outlook
Policy support required…impact of elections unknown

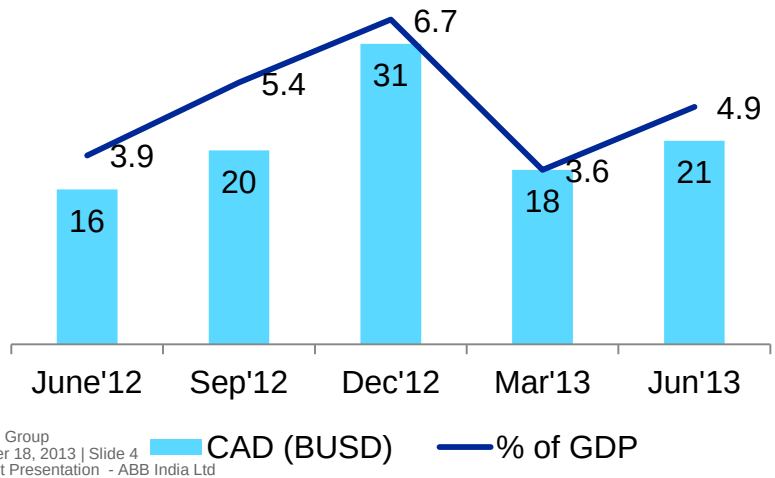
Real GDP Growth (%)



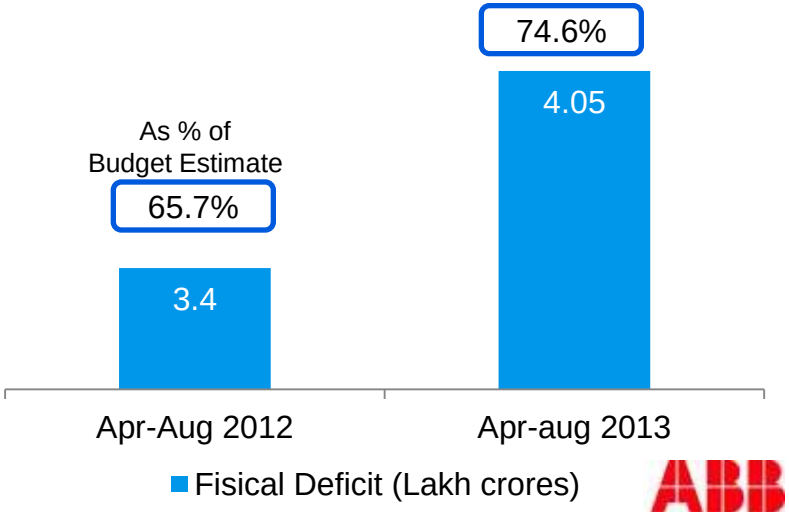
IIP YoY change (%)



CAD widens to 4.9% of GDP

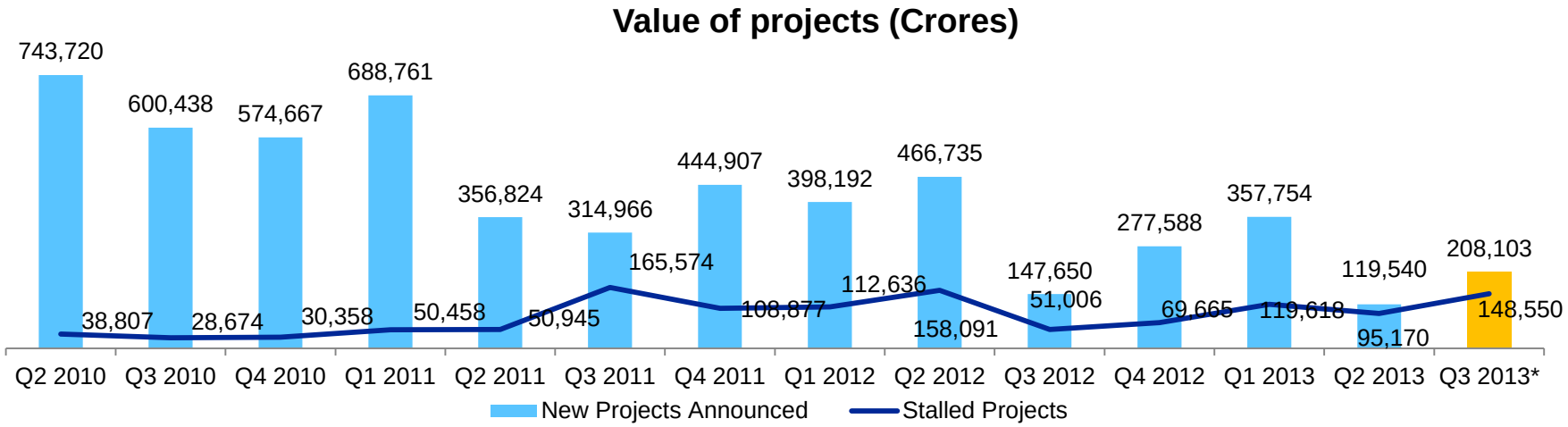


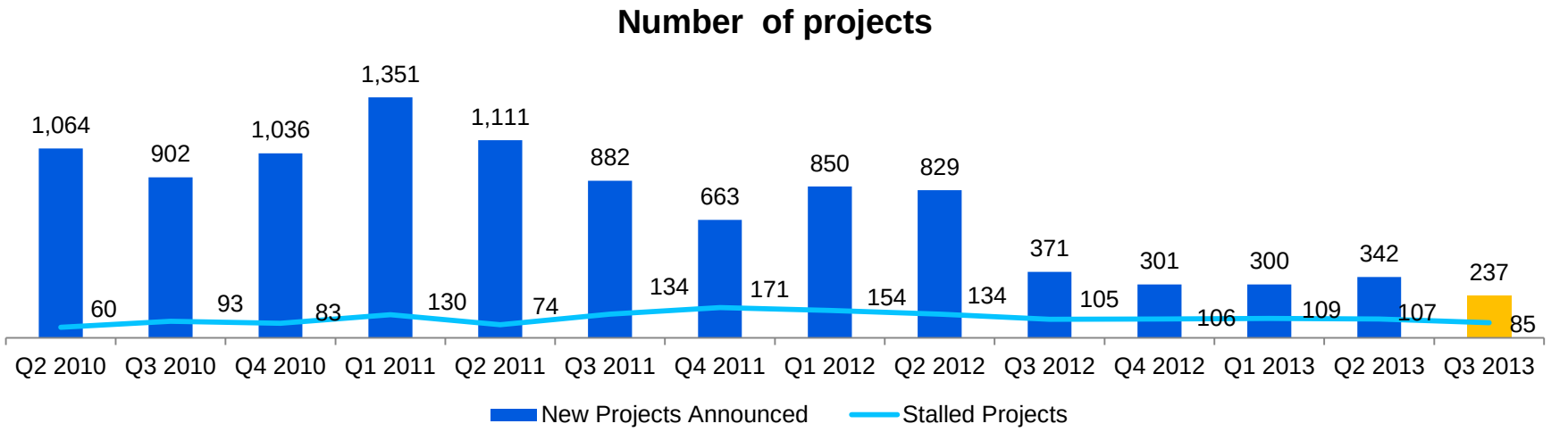
Fiscal Deficit swells



Source: BCG, GoI, Global Insight

Project data
New projects still at a dismal state



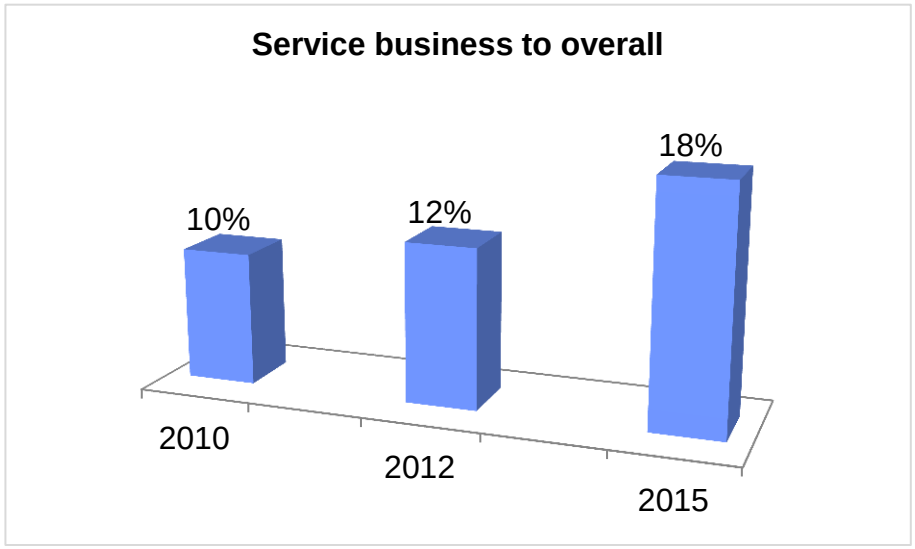


Note: Q3 2013=Till Sept 24, 2013 Data
Source: Centre for Monitoring of Indian Economy (CMIE)

Growth areas
Balancing traditional market slowdown

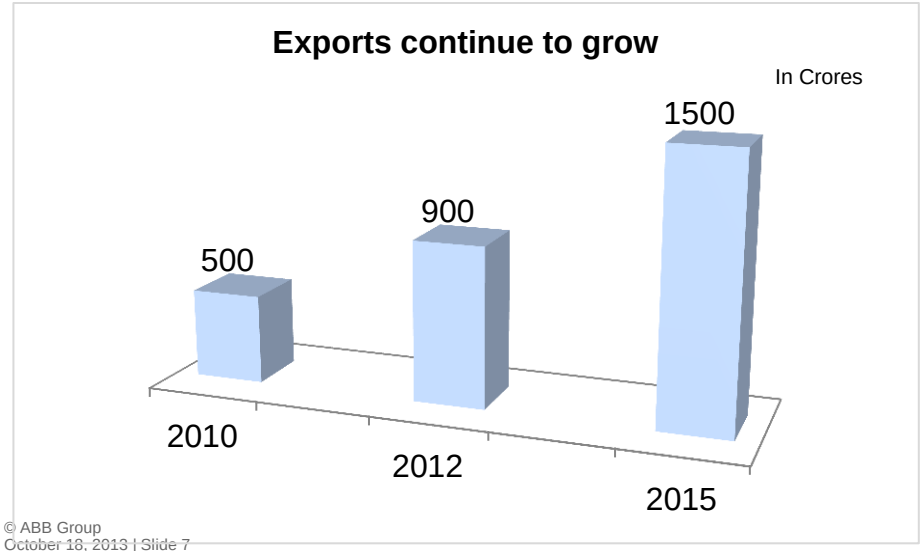
			Potential Market – Next 5 Yrs
Urbanization		Tier 2 metro & DFCs Buildings Data centers	~20,000 Cr
Grid reliability & interconnection		HVDC SVC & WAMS Distribution Franchises PF regulations	~ 23,000 Cr
Energy Efficiency		Perform, Achieve, Trade Process Optimizations Power Factor corrections	~ 6000 Cr
Renewable Energy		Grid connected solar Wind	~ 18000 Cr

Accelerating growth in services & exports



Service Portfolio

- Spares and Consumables
- Maintenance & Repairs
- Engineering & Consulting
- Extension, Upgrades, Retrofit
- End-of life services
- Training



Our Export offerings

- HV Breakers, MV Switchgear, Transformers, Substations, MCBs, LV Systems, Plant automation

Geographies

- Europe, Americas, South Asia, Middle East & Africa

ABB India Limited – Export Portfolio

Power Products – High Voltage

Circuit Breakers

Instrument Transformers

Disconnectors

Capacitors

Power Products – Medium Voltage

11kV/33kV Indoor S.gear / Unigear Panels

SF6 Circuit Breaker

Indoor / Outdoor Ring Main Units

Power Products – Transformers

131 MVA – Energy Ventures, Malyasia

25 MVA – EEPCO Ethiopio

570 MVA Generator Trafo for Bangladesh thru ABB Singapore

ABB India Limited – Export Portfolio

Process Automation

Seamless Tube Mill in Saudi Arabia

Power Systems

Substation project in Sri Lanka

Low Voltage Products

Contactors

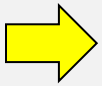
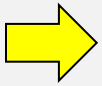
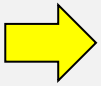
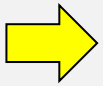
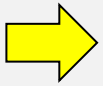
MCB s

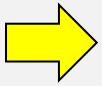
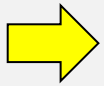
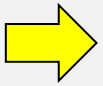
Switch Fuse

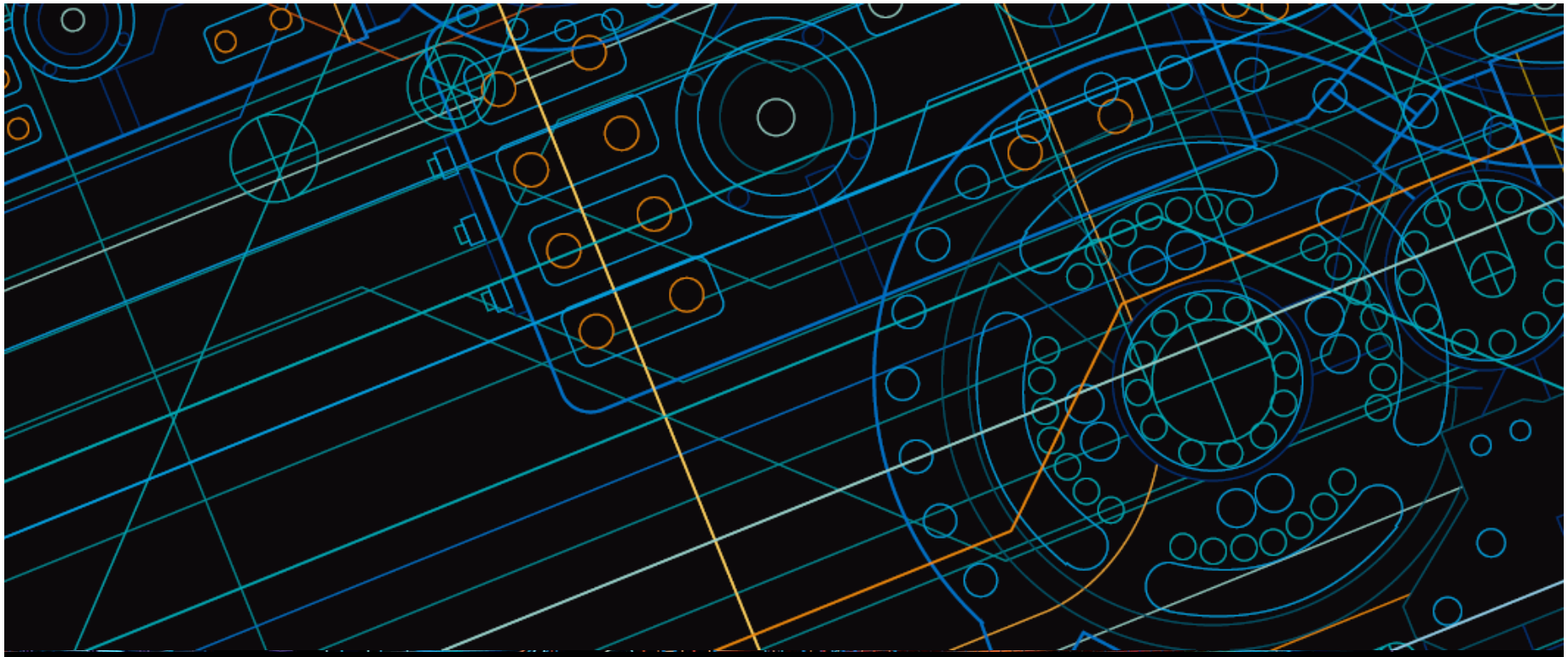
Switches OS 200A to 800A

MNS Switchboards

Key Sectors
2014 Outlook

Customer Segment	Segment investment growth/outlook	
	2013	2014
Steel		
Cement		
Oil & Gas		
Mining		
Paper		

Customer Segment	Segment investment growth/outlook	
	2013	2014
Power Generation		
Power T&D		
Renewable-Solar		
Renewable-Wind		
Railways		



October 17th 2013, Tajinder Vohra

Operations & supply chain

Creating Competitive Operations
Scope and Scale

Material Costs

Material Costs Improvement

- Negotiations, Localization
- Redesign, Indigenization
- Project Execution
- Global Contracts

Operating Expenses

(personnel, other operating costs)

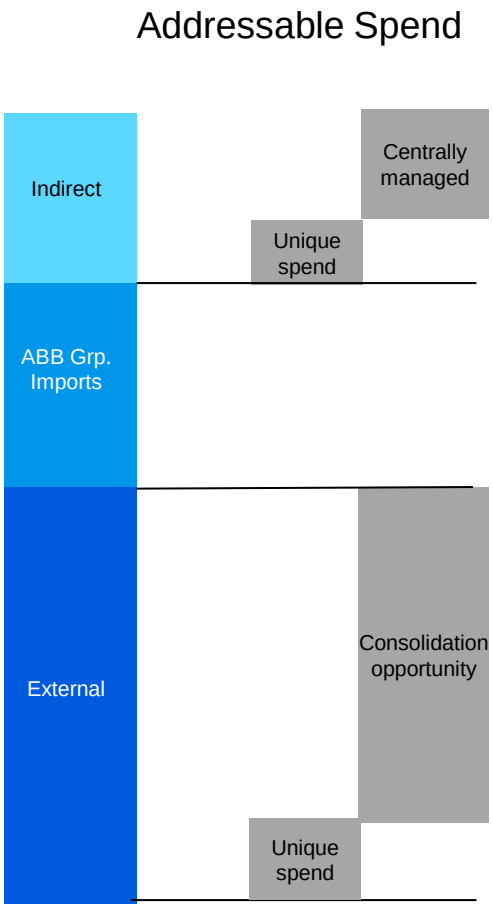
Operating Costs/Other Cost Improvement

- Footprint Rationalization
- Manufacturing productivity
- Quality improvement
- Factory Upgrades

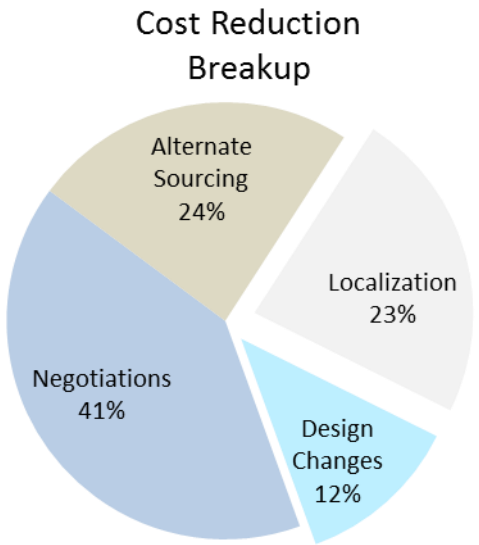
Resources and teams in Place

- Supply Chain and Operation Excellence team at India level – 400+ people
- 18+ In country for country Indigenization projects underway
- 300+ Operational Excellence projects underway
- Country level Technology Organization

What are Supply Chain opportunities in India
A supply side perspective



- Over 50 % of external spend covered by top 10 categories
- Leveraging global contracts across Steel, Castings, Transportation etc.
- Capitalizing on overcapacity in Supply Base
- Country Technology teams driving design changes for cost and localization

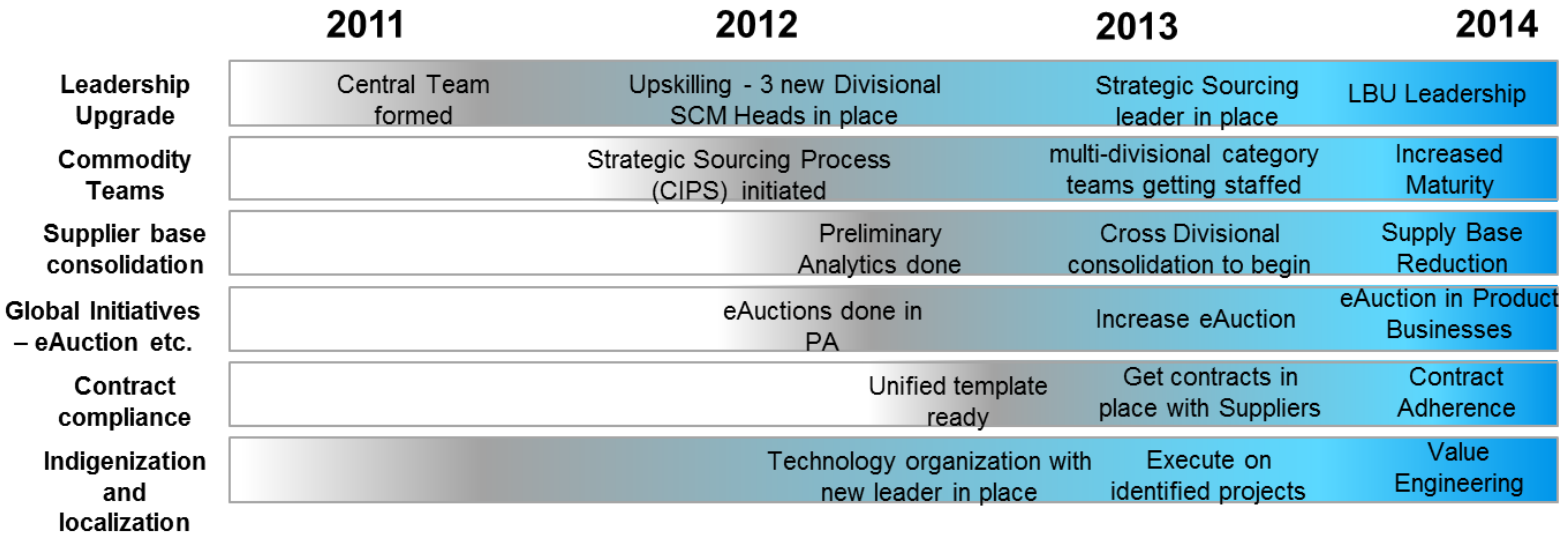


Source: e-SMART

Material cost
Some traction already but significant opportunities

Material Cost as percentage of Revenue

Down from 74% in 2011 to 70% in 2013



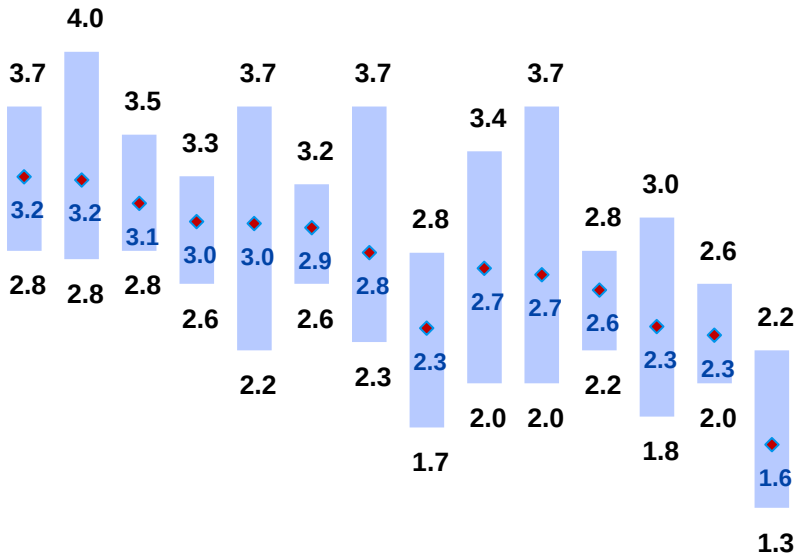
Source: Internal

Manufacturing Operations Assessment

Leveraging Global resources to improve operations

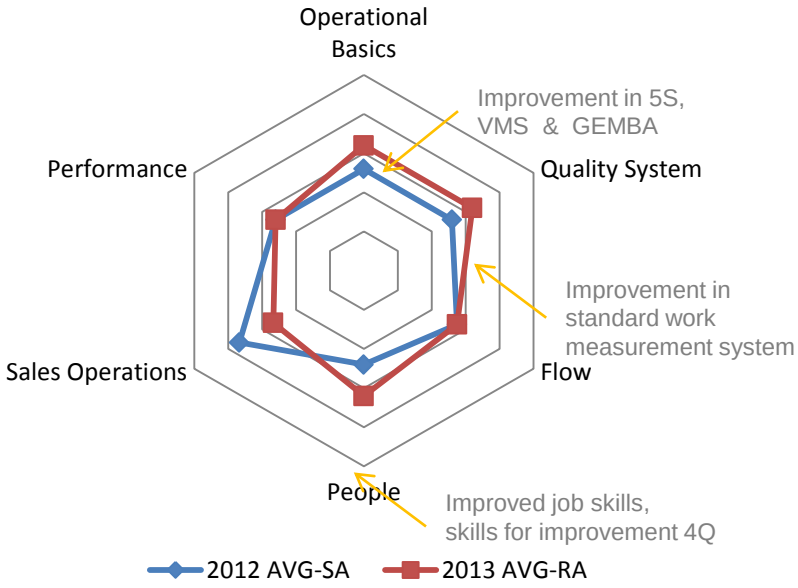
Scores across ABB India

(1 – low , 5 – highest)



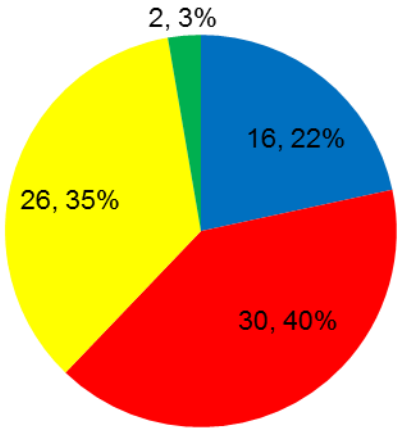
Improvements seen in the 2013 independent Re-assessments done

- 53 assessments completed (36 self, 17 Independent)
- Perceptible improvement in last twelve months

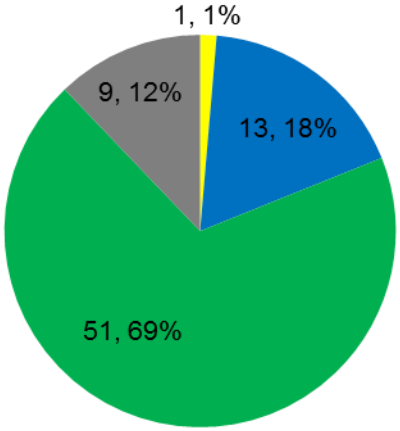


Sustainability in Supply Base

Moving India Supply base to global levels



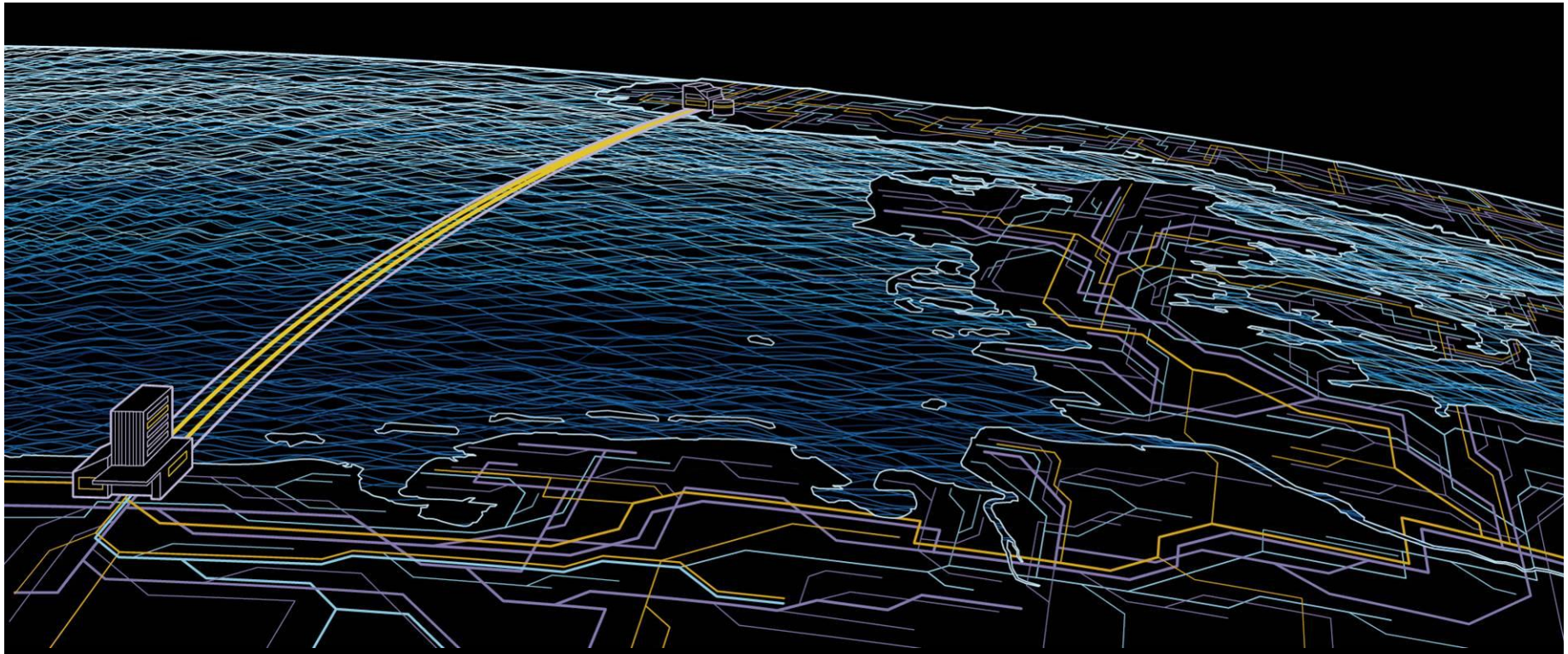
Supplier Risk Profile 2012



Supplier Risk Profile 2013

- **Extremely High Risk:** Lack of consent to operate /environmental licenses, fire protection, worker safety, no ESI/PF for workers, having child labour/forced labour etc
- **High Risk:** Lack of legal documentation, excessive overtime hrs, less than legal wages, no proper waste management, no health & safety/environment risk assessment etc
- **Medium Risk:** Suppliers having assessment score between 60-80%
- **Low Risk:** Suppliers having assessment score more than 80%

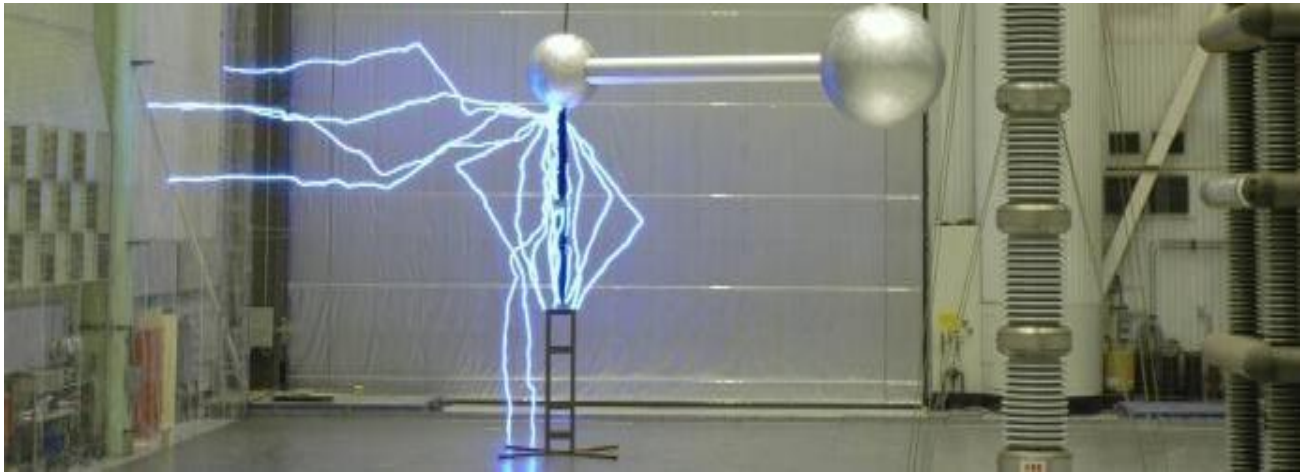
- 74 suppliers audited between 2009-2012 for adherence to Supplier Code of Conduct
- Over 90% closure achieved in five out of six assessment categories
- 9 suppliers de-sourced from supply base due to continued non compliance
- Supplier audits conducted by an international third party audit agency
- 106 suppliers trained in ABB sustainability requirements during years 2012-13



October 17th 2013, Giandomenico Testi

ABB
A Technology Leader

Innovation is key to ABB's competitive advantage
Leadership built on consistent R&D investment



- More than $1.4 billion invested annually in R&D
- 8,000 scientists and engineers, >13% in India
- 20,000 engineering resource pool, >10% in India
- Collaboration with 70 universities
  - MIT (US), Tsinghua (China), KTH Royal Institute of Technology (Sweden), Indian Institute of Technology (New Delhi), ETH (Switzerland), Karlsruhe (Germany), AGH University of Science and Technology (Poland)

India contribution to ABB's technology development
Local content overview

Power Products		Four global/local Technology Centers High/Medium voltage Switchgears and Power Transformers Complete product portfolio in three manufacturing sites First 1200 kV transformer and Circuit Breaker developed for and installed at PGCIL
Low Voltage Products		Three global/local Technology Centers Breakers and switches, control products, wiring accessories and cabinets Strong focus on localizing and adapting product portfolio to local needs and export Series production manufacturing technologies in focus
Discrete Automation and Motion		Four global/local Technology Centers Leadership in Robotics, Drives and PLCs application and engineering Software Electronic Drives and Converters, Robotics, Motors and Generators Special focus on Photovoltaic and Railways applications and Service technologies
Process Automation		Three global/local Technology Centers Leadership in Plant Automation, Instrumentation and Metal Industries Turn key projects, DCS systems, P/T/Flow Instruments , Turbochargers Special focus on engineering for Oil&Gas, Cement, Metals, Minerals, Pulp&Paper
Power Systems		One global Technology Center Leadership in Power Plant and Substation Automation, HVDC and FACTS Turn key projects, DCS and Electric systems for power plants , Relays and Substation automation systems, Water Plants automation, Renewables, HVDC and FACTS systems

Localization
1200kV Transformer & 1200kV Circuit Breaker

Improving capacity, reliability and efficiency in the grid
A pioneer in smart technologies

	Challenge	ABB solution
	▪ **China**: deliver 6,400 MW of hydropower over 2,000 km	▪ Transmission at ultrahigh voltage ▪ Minimal losses with direct current solution
	▪ **US**: Increase capacity and reliability for Texas utility	▪ World's largest installation enabling existing lines to carry more power ▪ Also enables integration of renewable energy
	▪ **India**: Improve reliability in grid serving state of Karnataka (pop. 53 million) ▪ From transmission (400 kV) to distribution (33 kV)	▪ Network management with real-time control ▪ Key building block for smart grid ▪ World's largest SCADA system controlling 900 substations


NELAMANGALA 400 / 220 kV
KPTCL - DAILY LOG ANALYSIS REPORT - 220 kV STATION
AVAREGERE 66/ 11 kV
GULBARGA
BAGALKOT
TUMKUR
HASSAN
BANGALORE METRO
BANGALORE RURAL
MYSORE

Fashioning the world we will live in tomorrow
Tackling challenges with customers and partners

- R&D programs focus on incremental and breakthrough developments to address challenges including:
  - Integrating renewable power sources into the grid
  - Enhancing power network efficiency, reliability and flexibility
  - Improving industrial resource efficiency and asset productivity
  - Optimizing flexibility and reliability

Outlook

Looking into the future
Mixed macro trends ahead

Growth

- No contraction in demand side potential
- Large infrastructure projects yet to revive but new growth areas emerge
- Recent reforms generate hopes, cautiously optimistic

Execution

- Increase market penetration through stronger portfolio
- Aggressively capture export opportunities
- Indigenization of power products continues to drive profitability
- Sustain improvements achieved in project execution and risk mitigation
- Growing service revenues leveraging large installed base
- Scale up cost savings and productivity improvements
- Capitalize on improved customer relationship (NPS)

Cash and net working capital

- Cash over revenue
- Risk return profiling in long term projects
- Optimize cash conversion cycle

Power and productivity
for a better world™