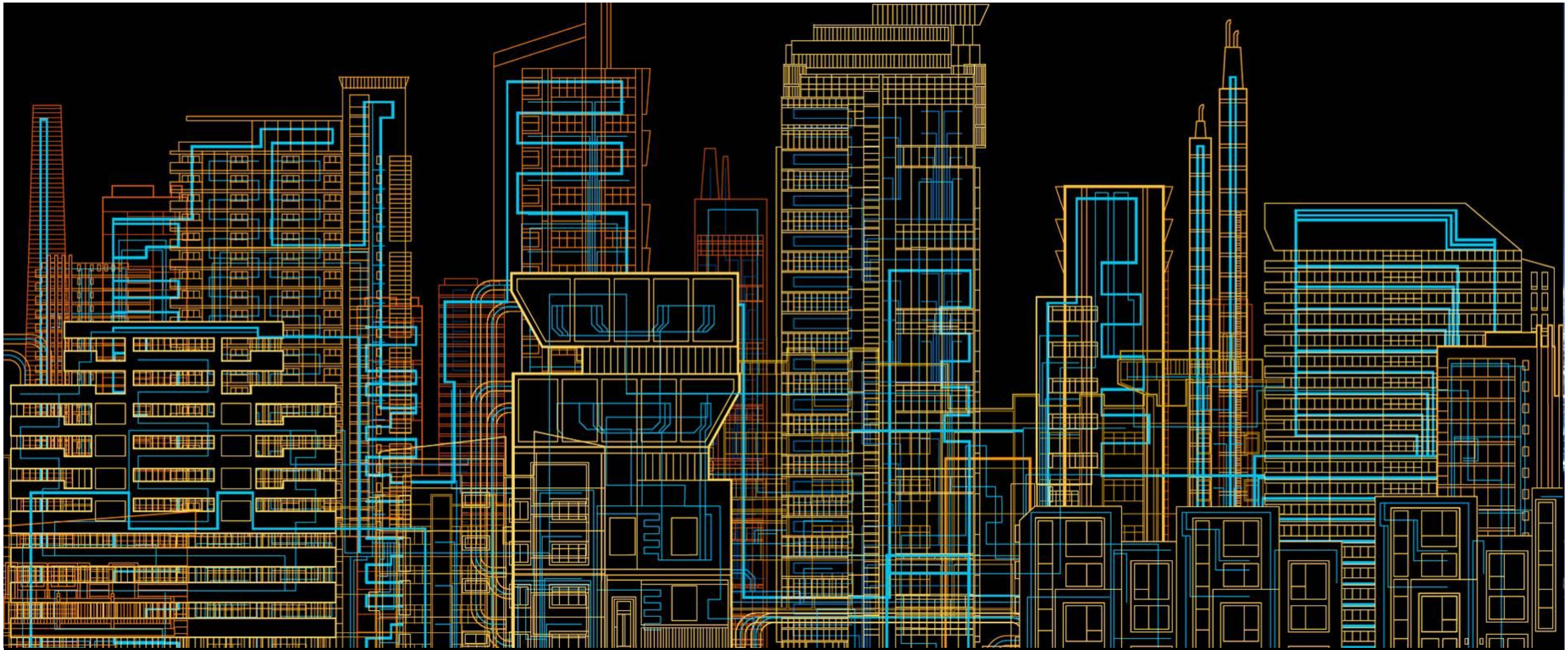
Capital Markets Day London, September 12, 2012

Driving competitiveness

Power and productivity
for a better world™



Prith Banerjee, Capital Markets Day, London, September 12, 2012

Driving competitiveness
Through technology and innovation

R&D at ABB
Solution-driven innovation

7 global Corporate Research Centers

>7,500 technologists in >30 countries

$1.3 billion invested in 2011

Partner with 70 universities and companies

Evolutionary and disruptive technologies

Recent innovations in Discrete Automation
PalletPack 460

I Discrete Automation	II Industrial Motion	III Renewables	IV Power Control and Quality	V Transport

PalletPack 460 –

function package for fast, flexible and cost-effective palletizing


IRB460 (110kg/2,4m)


FlexGripper (Claw, Clamp, Vacuum)


TeachPendant

PalletWare software


AC500 PLC


Jokab Safety PLC

Localizing products
Example: India - Medium voltage products

ZN1 switchgear for primary power distribution

Safelink ring main unit for secondary power distribution

IT/OT convergence real-time data for decisions
Managing workforce for >50,000 miles power lines

CenterPoint Energy

Headquartered in Houston, Texas

Workforce:

8,800

Asset footprint:

Power lines:

> 50,000 miles

230 substations

14 service centers

Customer need

- Mobile workforce management and business intelligence to be added to existing ABB distribution automation system

Ventyx response

- Service Suite mobile workforce management software
- FocalPoint business intelligence solution

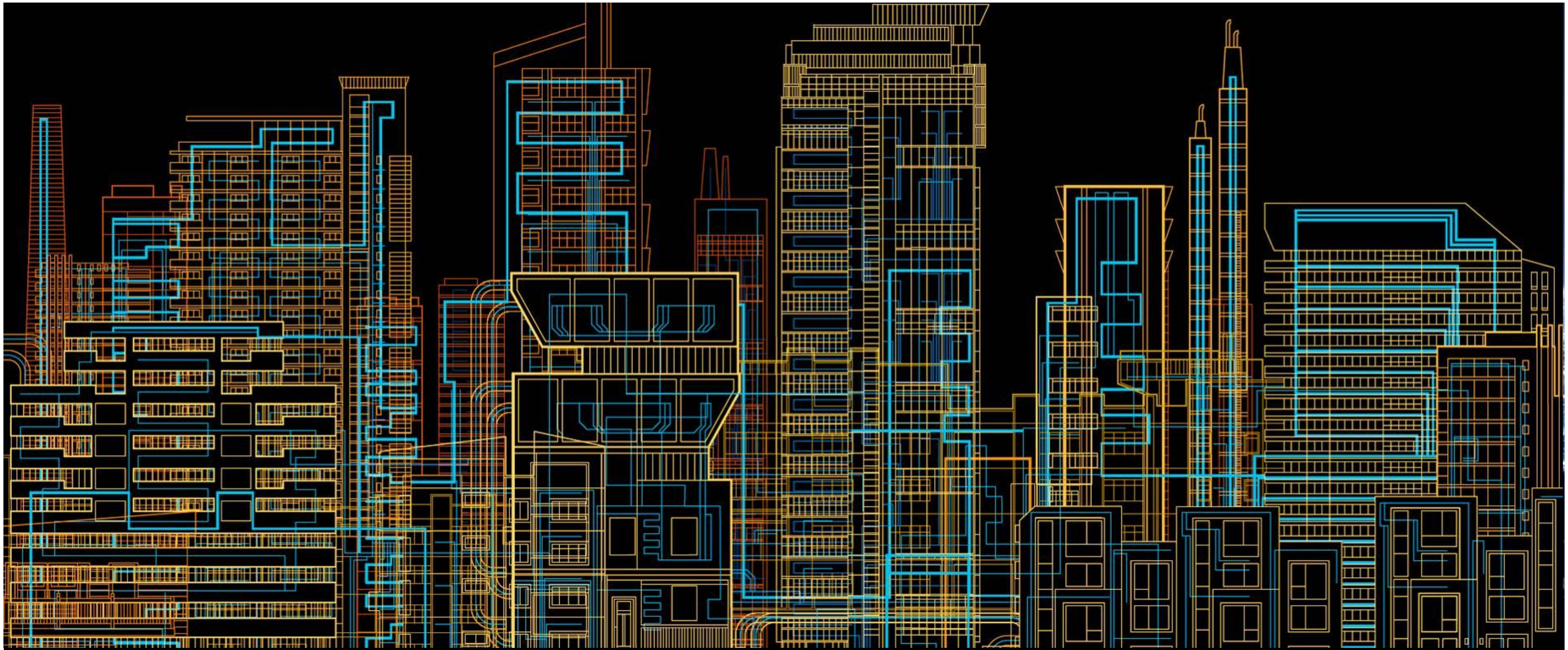
Customer benefits

- Solution supports multiple classes of field service work
- Integration into existing Network Manager DMS
- Presentation of complex data to users via “dashboards”
- Simplification of decision making

ABB

Observations about innovation at ABB

- Global organization, strong local focus
- Close alignment of R&D and business to derive competitiveness
- Opportunity for more strategic, longer term R&D
- Corporate Research Centers
  - Hundreds of research projects
  - Encourage researchers to work on larger, multidisciplinary teams over 3-5 years



Bill Black, Capital Markets Day, London, September 12, 2012

Driving competitiveness
Through cost savings and productivity

ABB has evolved over the past decade
From holding company to globally optimized organization

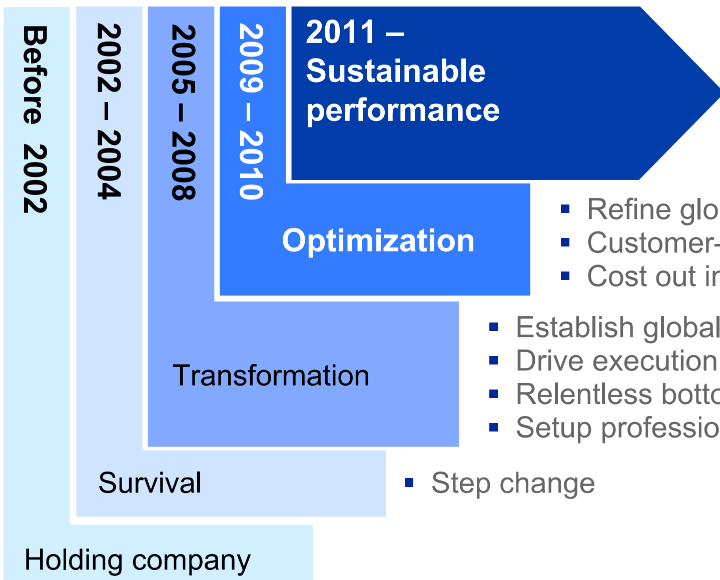
ABB in 2000

Highly decentralized conglomerate	
Cons	**Pros**
▪ 1000s of P&Ls ▪ Little scale ▪ Poor coordination ▪ Little best practice sharing	▪ 1000s of P&Ls ▪ Local autonomy ▪ Speed to market ▪ Market segmentation

Highly centralized organization	
Pros	**Cons**
▪ One size fits all ▪ Leverage scale ▪ Process optimization ▪ Best practice sharing	▪ Operational flexibility ▪ Corporate down view ▪ Slow to market ▪ Local market effectiveness

Evolution in cost and productivity
Moving from crisis response to performance culture

ABB's quest for excellence



- Optimize footprint
- Faster customer responsiveness
- Value adding acquisitions
- Sustainable cost reduction

- Refine global footprint
- Customer-driven performance
- Cost out in market downturn

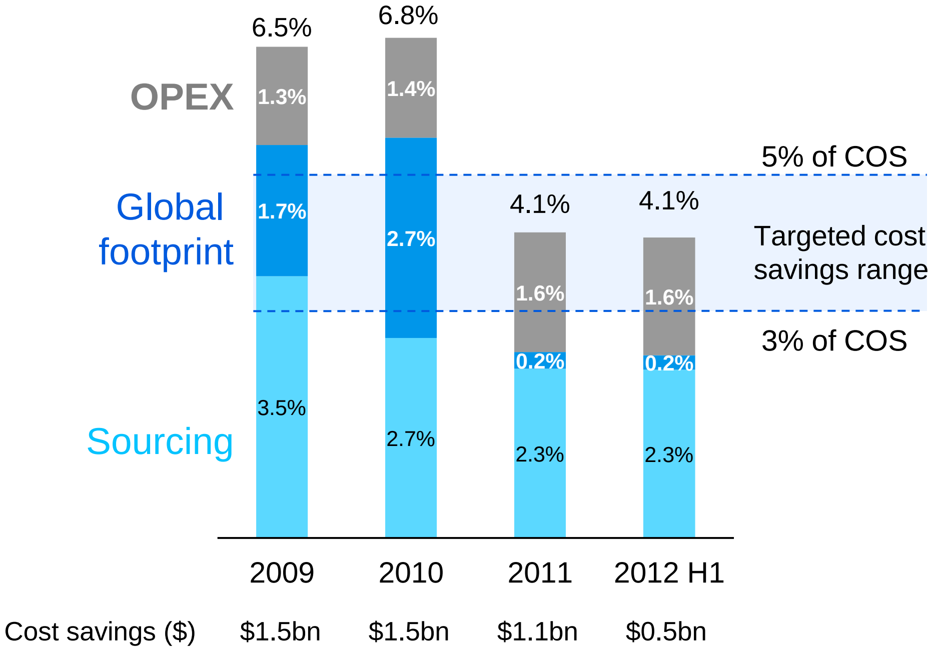
- Establish global footprint
- Drive execution for organic growth
- Relentless bottom-line focus
- Setup professional Supply chain management

- Step change

We aim for best-in-class performance
3-5% cost of sales saved every year

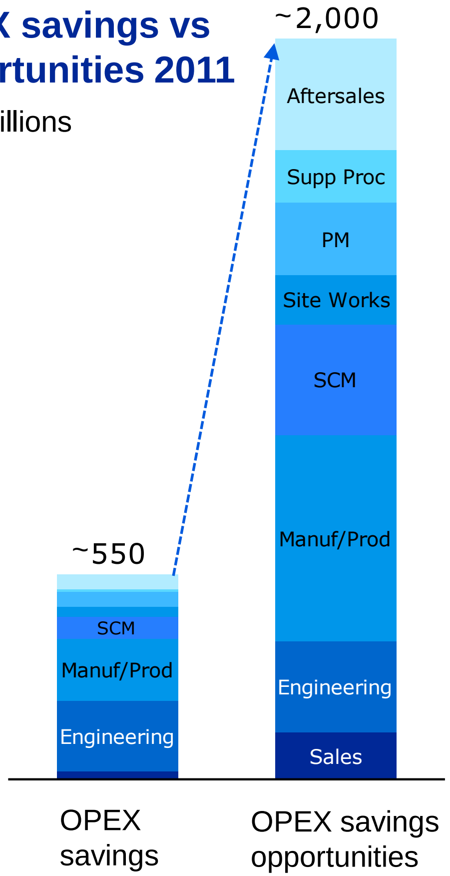
Cost savings 2009-2012

% of cost of sales (COS)



OPEX savings vs opportunities 2011

US$ millions



[1] Incl. G&A savings

>2,000 OPEX projects running, already >$300 mln benefit expected in 2013

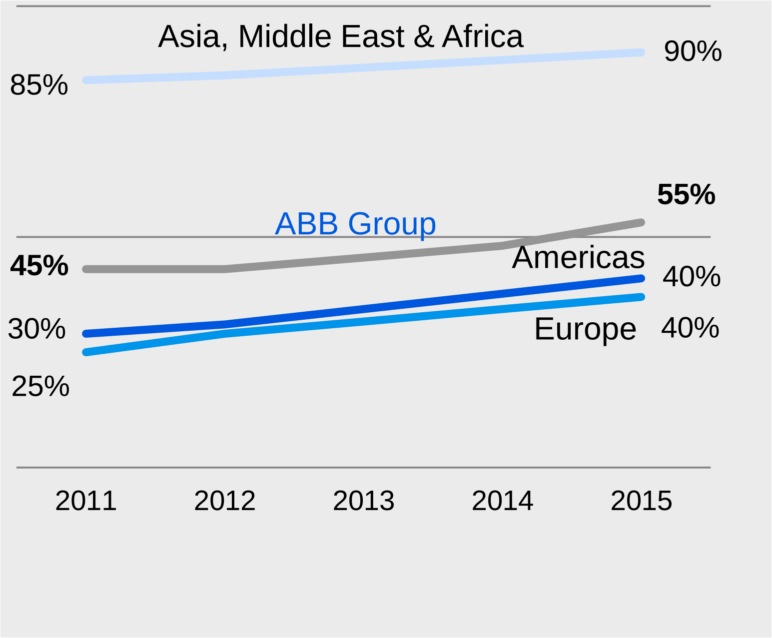
Savings by type and value
Practical examples

		Savings	
Supply chain	Professional SCM	15-20%	> 3,000 buyers active
	Re-sourcing	10-15%	Emerging market, best cost sourcing
	Collaboration and consolidation	15-20%	Steel procurement and indirect materials
Global Footprint	Restructuring	5-15%	Self-sufficient trading zones
Operational excellence	OPEX projects	40-50%	Design-to-cost
	Total	**3-5 % COS**	

Re-sourcing from global best cost suppliers
More emerging market sourcing

Re-sourcing

Estimated share of emerging market sourcing by zone 2011-2015



- Emerging market sourcing growing to 55% of total
- Best cost sourcing overlaid on EM sourcing
  - Optimize transport and logistics costs
  - Minimize in-shipping inventory
  - Minimize customer lead time
  - Optimize customs and import duties

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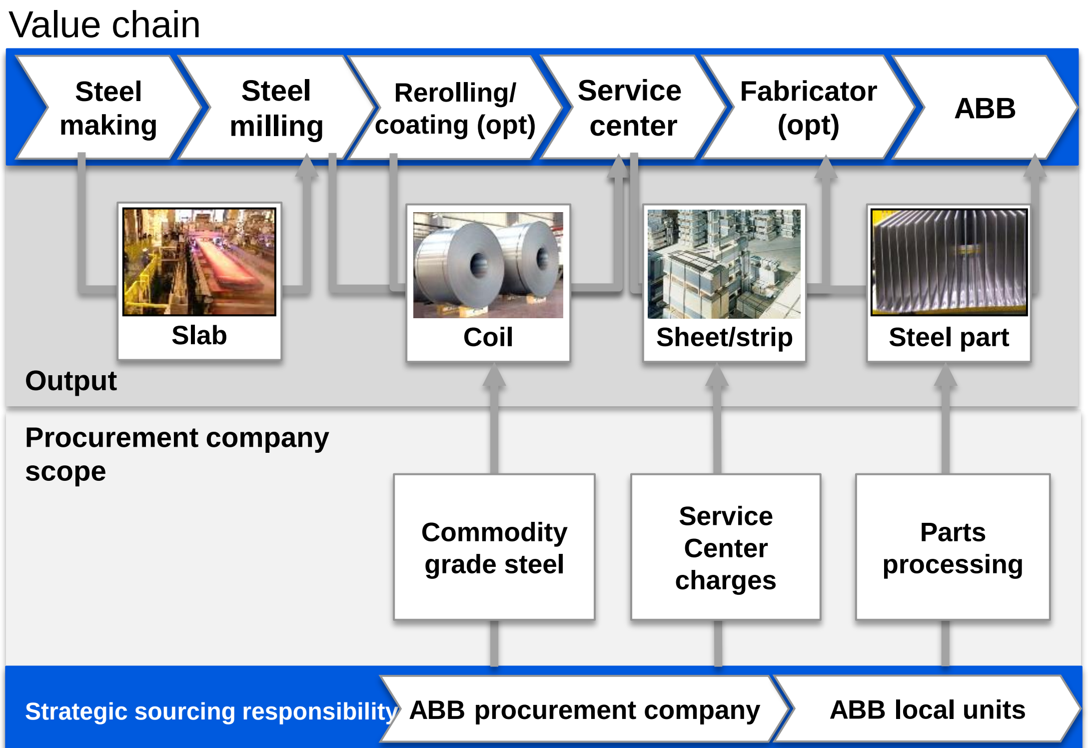
Collaboration and consolidation
Procurement company - Steel

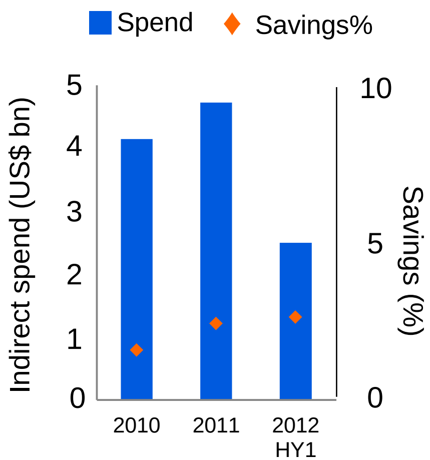


- Currently served by 25 service centers and 12 steel mills
- Down-selecting to 5 service centers and 2 steel mills
- 1st shipment expected October 2012

Annual savings potential ~$30 million in Europe

Collaboration and consolidation
Indirect spend

- Procurement standardization for indirect spend across ABB
- Leverage supply channels for key purchases, eg, travel, services, supplies
- Rationalization of demand, pre-negotiated catalogs and content
- Kick off in 2012 in Sweden, Finland, Switzerland, Germany, India and the US



Total indirect spend

More spend managed by SCM professionals

- Ramp up of skilled SCM resources
- Strategic sourcing
- Procure-to-pay efficiency

Annual savings potential ~$200 million

Savings by type and value
Practical examples

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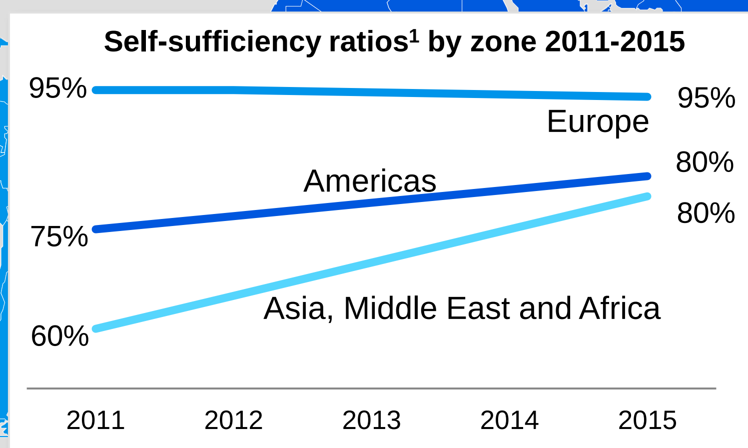
Total		3-5 % COS	

Global footprint strategy
Self-sufficient trading zones

Americas
- Lift self-sufficiency to 80%
- Synergies from acquisitions
- Extend Mexico and Brazil

Europe
- Europe-for-Europe growth
- Renewable energy
- Extend eastern Europe activity

Asia and MEA
- Lift self-sufficiency to 80%
- More local engineering, R&D
- Increase exports within zone



[1] Share of locally generated revenues met by local supply, estimated

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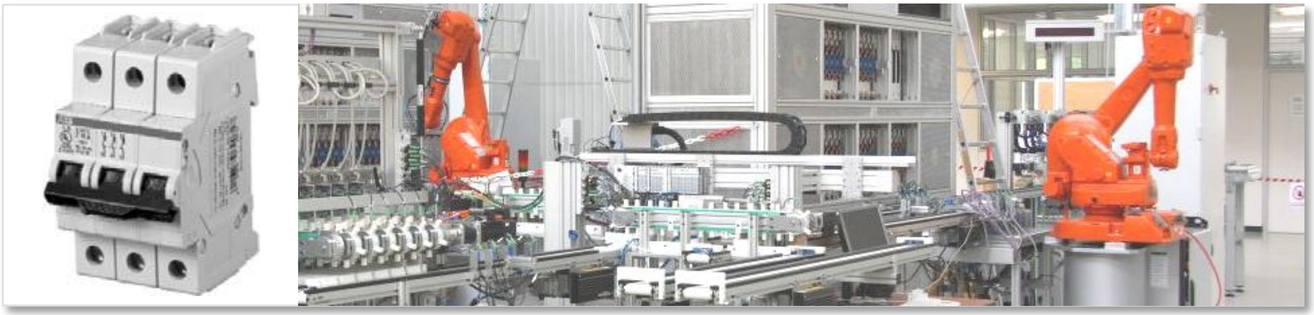
Operational excellence projects
Design-to-cost: miniature circuit breaker



Problem

- Next stage of competitive performance needed

Solutions

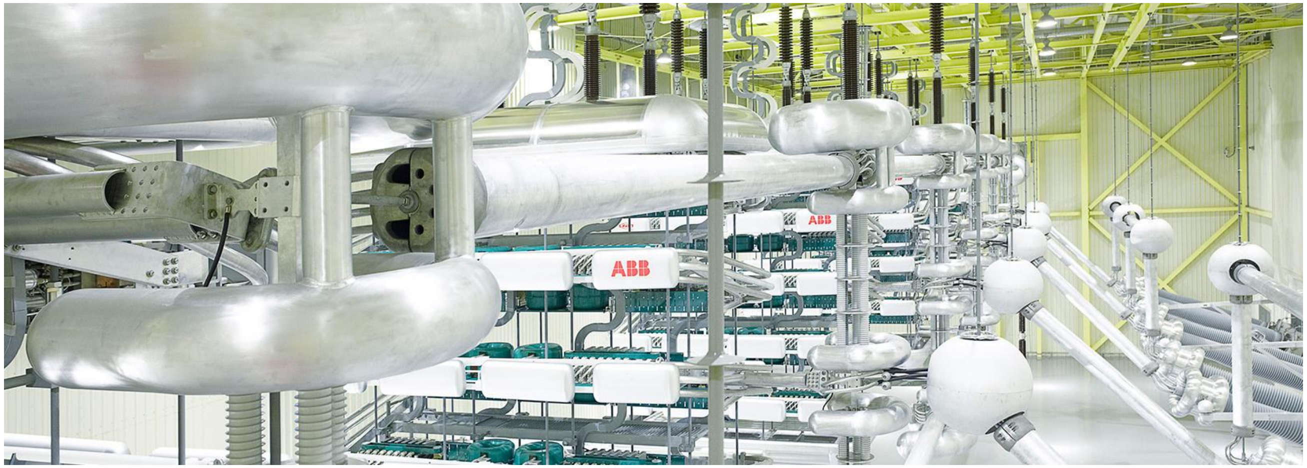
- New design, global production concept
- Global portfolio in all producing units

Results

- Market-beating product portfolio
- Global MCB portfolio produced in region, for region

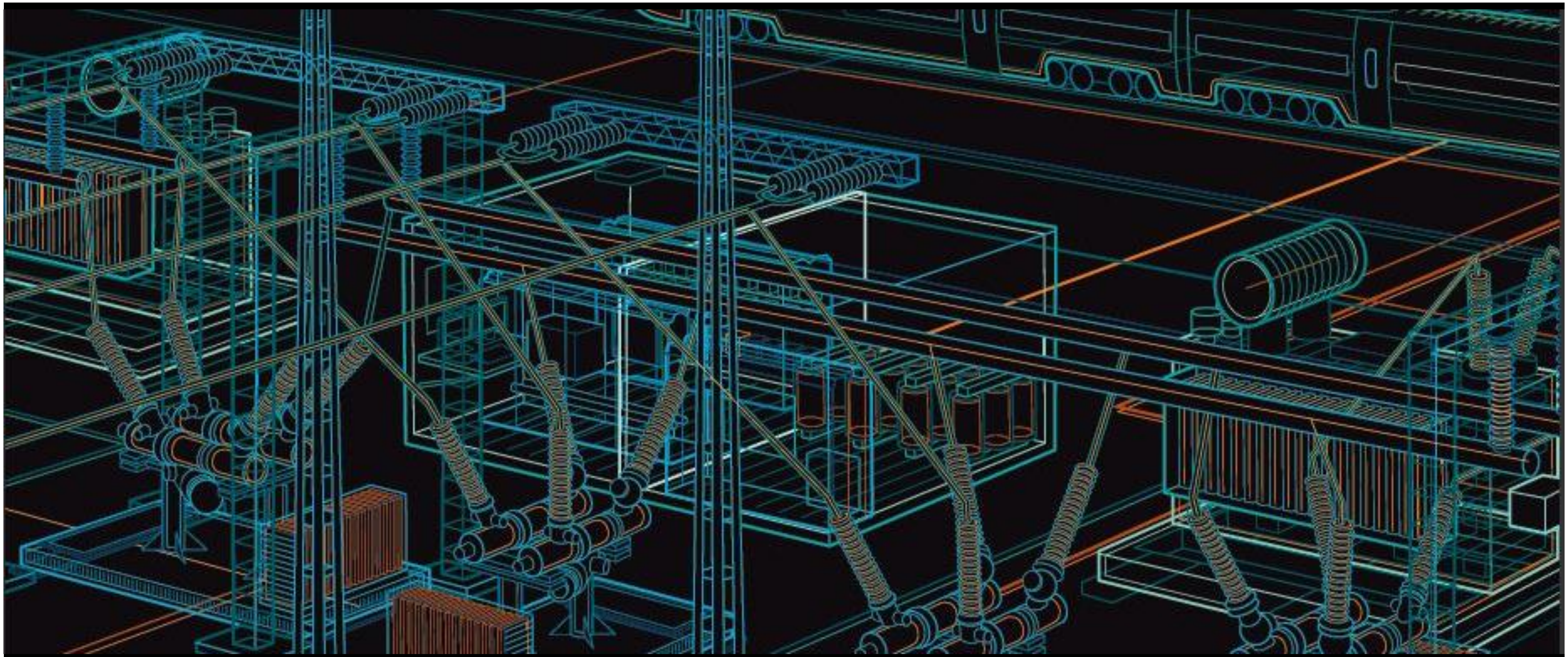
Annual savings potential ~ $16 million

On track to deliver 3-5% savings into the future
Still many untapped opportunities



- Solid track record of driving performance
- Robust savings delivery in 2009, 2010, 2011 and 2012
- New supply chain opportunities still to be tapped
- 3,500 operational excellence projects in the pipeline

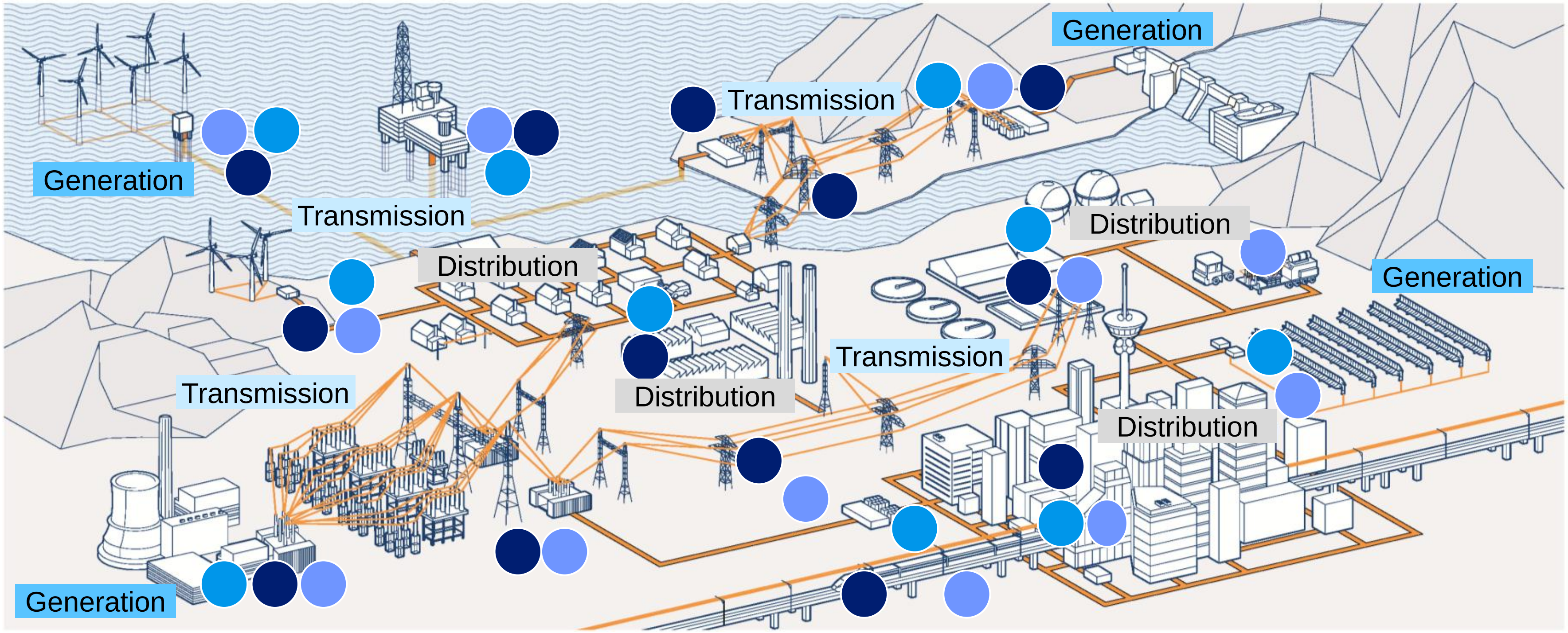
ABB is well on track to deliver 3 – 5% COS savings every year



Bernhard Jucker, Capital Markets Day, London, September 12, 2012

Driving competitiveness in Power Products

The broadest offering for efficient power delivery
From power plant to end user



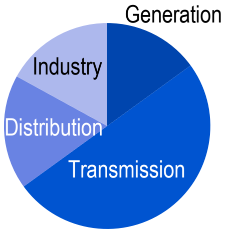
High voltage products   Medium voltage products   Transformers

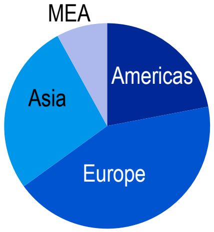
ABB's comprehensive Power Products offering
Serves major sectors across geographies

Main products | **Sectors** | **Geographies[1]**

High voltage

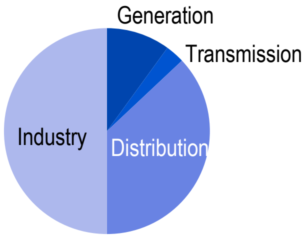
- Gas insulated switchgear
- Generator circuit breakers
- Breakers and modules
- HV components
- Services

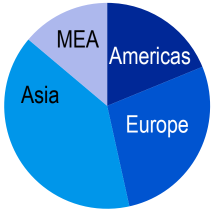




Medium voltage

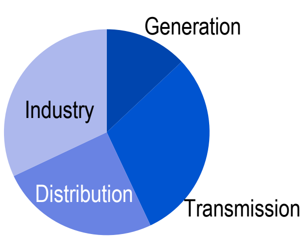
- Switchgear
- Apparatus
- Distribution automation
- Modular systems
- Services

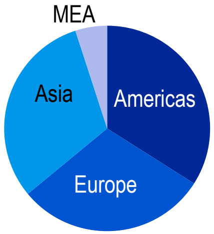




Transformers

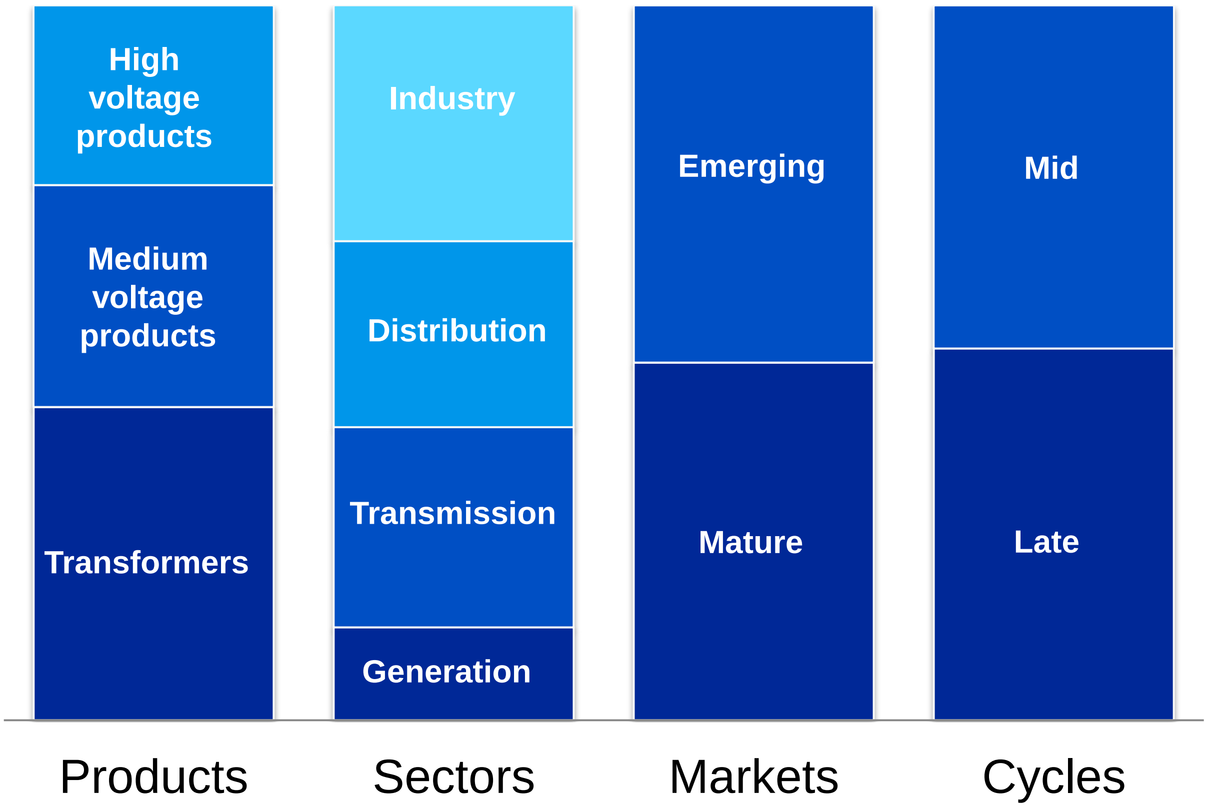
- Power
- Distribution
- Dry
- Insulation and comp.
- Services





[1] Based on 2011 orders received

Differentiated and balanced portfolio
Enables benchmark growth and profitability levels



Estimated split based on typical mix of orders received

Relative competitive advantages
ABB uniquely positioned

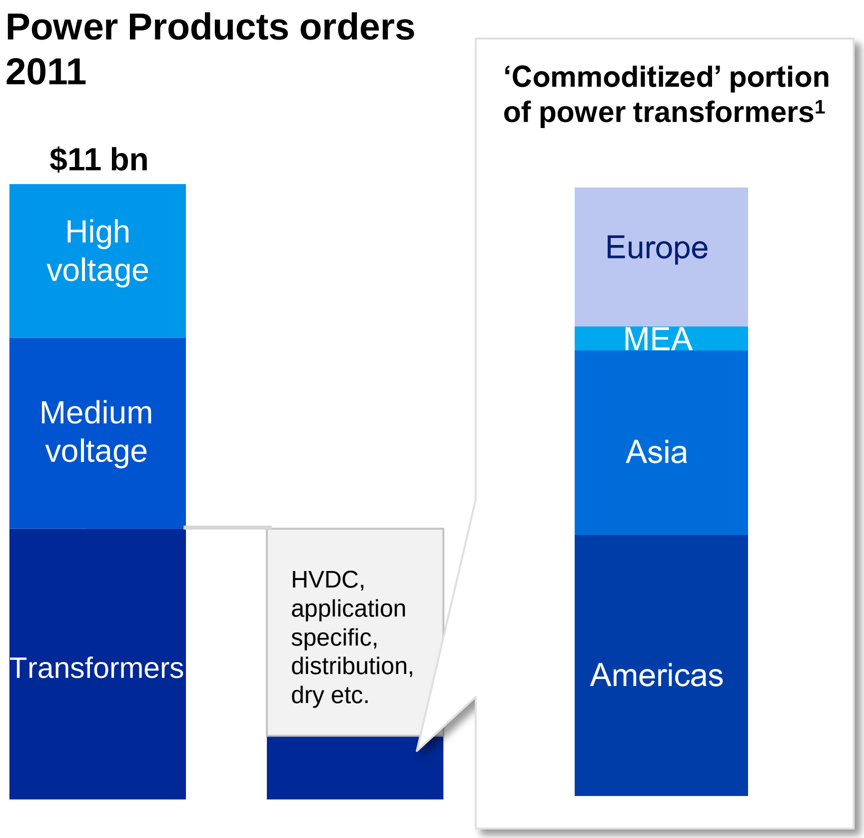
Key growth and margin drivers

	Product scope	Geographic coverage	Production footprint	Installed base	Technology	Service capability
ABB	●	●	◕	●	●	◕
Emerging global companies	◑	◑	◑	◔	◑	◔
Local companies	◔	◔	◔	◔	◔	◔

ABB advantages

- Breadth of offering
- Depth of technology
- End-user segment diversity
- Global view and presence
- Vast installed base
- Market leading positions
- Local market focus and footprint advantage
- Ability to leverage scale
- Multiple channels to market
- People and domain competence

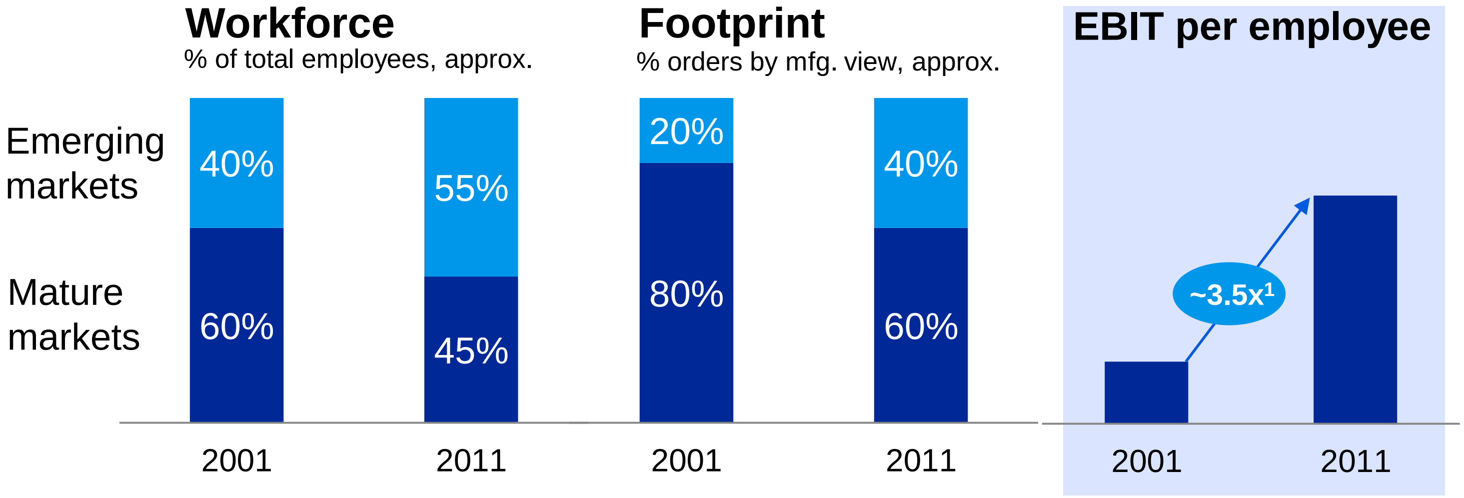
Diversified portfolio mitigates downside risks
Low exposure to ‘commoditized’ power transformers



- ABB market share is higher in products and markets where margins are better
- Priority: relentless cost reduction
  - Reduced capacity by ~20% since 2008 (~10% last 12 months[2])
  - Product benchmarking
  - Standardized product platforms
- Grow the rest of the portfolio where barriers to global markets are higher

[1] Estimated
[2] 12 months to June 2012

Staying ahead of the curve
By taking the lead on cost and productivity

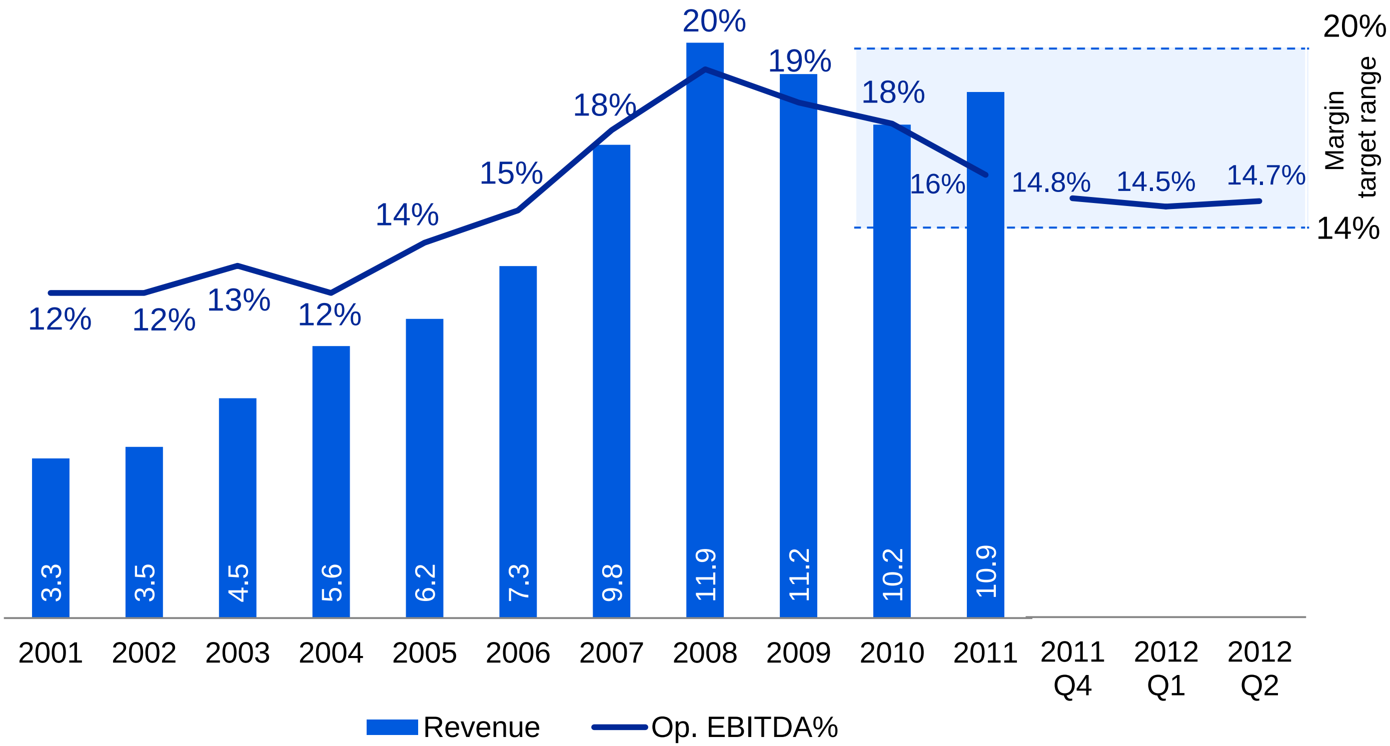


- Improved productivity[2] by ~60% since 2001
- $1.3 billion cost savings 2009-2011
- Share of service revenues doubled from 2001-2011
- Technology investments driving ~30% reduction in product costs

[1] Growth rate In local currencies
[2] Based on value add
Note: 2001 numbers are management estimates

Broad portfolio and footprint
Key to our sector-leading profitability

Power Products revenue and operational EBITDA margin 2001-Q2 2012
US$ billions and % of revenues



Note: For all periods pre-2009, revenues and op EBITDA % are management estimates and have not been adjusted for FX/commodity timing differences

Focus on margin reinforcement and expansion

A resilient and time tested business model
Ensuring profitable and sustainable growth

Market structure ⟷ **Cost structure**

Market structure

Established globally with ability to see ~85% of market demand

Demand side

- ~2,500 sales staff in 100 countries, ~65% in emerging markets
- Focused on creating demand locally

Supply side

- Focused on selectivity (optimal factory utilization) and product management

End-market focus



Cost structure

Balanced footprint; focused on cost optimization across economic cycles

Flexible

- 230 product lines manufactured in 110 locations
- Ability to quickly mobilize resources and adapt capacity
- 70% of total cost[1] is variable

Cost competitive

- ~55% workforce in emerging markets
- Footprint close to markets while maintaining economies of scale
- 5% annual productivity[2] gain

[1] Management estimate, Total Cost includes COS and SG&A; [2] Cost savings as % of prior year's Total Cost

Key priorities to secure market leadership
Technology, cost competitiveness and customer focus

In country for country

- Focus on key 25 markets with maximum potential
- Increase service competencies
- Build infrastructure to address next wave of EMs*

ANSI American National Standards Institute
IEC

Products

- Innovation in UHV, smart and eco-efficient products
- Significant cost reduction
- Expand R&D footprint in emerging markets

$1 billion R&D investment 2008-11

Footprint

- Continue optimization
- Expand with markets (eg, Saudi Arabia, Poland, India)
- Gain scale through feeder factories and COEs**

~$65 mln/yr. restructuring in last 3 yrs
~55% employees in EMs

Flawless operations

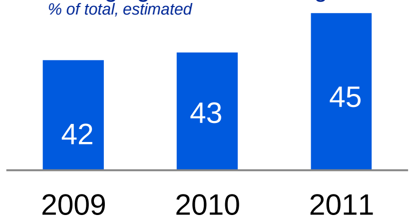
- Improve customer responsiveness
- Drive >5% of annual savings
- Improve working capital performance

On time delivery >95%
Cycle time reduction 25%

Supply chain

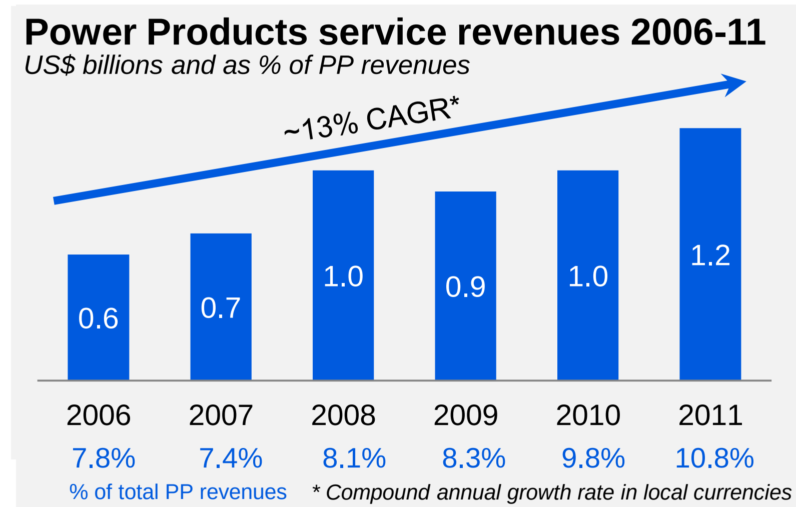
- Drive >5% annual savings
- Establish global SCM commodity teams
- Source from emerging markets (>50% of total)

Emerging market sourcing
% of total, estimated



*Emerging markets
**Centers of excellence

Service
Driving consistent growth



- Moved from reactive ‘fix and repair’ services to reliability and asset management
- New services (eg, on-site repair, diagnostics, life cycle management, retrofits)
- New service centers set up in >15 countries (eg, Poland, Qatar, Mexico, Chile)
- Added ~1,500 service staff around the world

Aging installed base driving demand
Service potential, example transformers

Installation and commissioning

Condition assessment

Spare parts

Trafo site testing™

Field service and maintenance

Trafo site repair™

Factory repair and upgrades

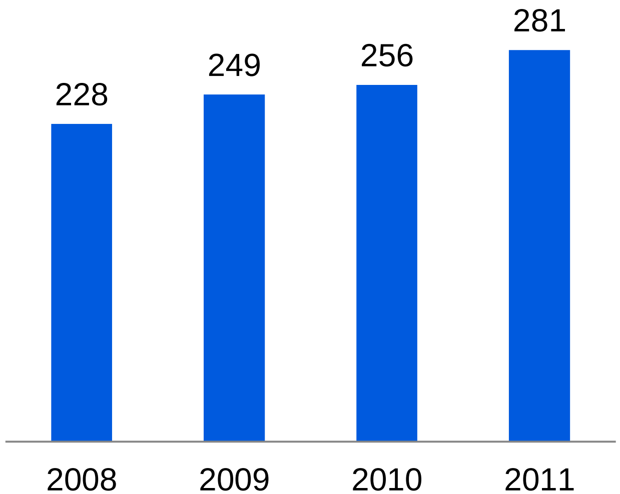
Sensors and real time monitoring

- 20% of initial transformer investment constitutes lifetime service (excl. repair and upgrades)
- Significant number of transformers commissioned in 1960-80s approaching end-of-life: major opportunity for life-cycle extension services
- Utility regulation on power availability and reliability driving transformer asset management
- Preventive maintenance program safeguards industry from expensive down-time
- Monitoring (onsite/remote) integral to evolution of smarter grids

Differentiate through innovation and cost optimization
Developing stronger, smarter and greener products

R&D investment

US$ millions



	2008	2009	2010	2011
as % of PP revenues	1.9%	2.2%	2.5%	2.6%

- Disciplined investment even in uncertain times
- Expand R&D workforce in emerging markets (~35% of total)
- Leverage corporate research competencies

Recent product launches

Cost optimization

Safe link outdoor MV switchgear

Metal enclosed capacitor bank

Smaller product footprint

DC Trac high speed railway circuit breaker

Green portfolio

420 kV GIS

Intelligent products

Gridshield recloser

Power electronics traction transformer

Higher voltages

800/1100kV HVDC transformers

Transformers
Leveraging technology as a key differentiator

Lowering environmental impact


Amorphous core


Dry type


BIOTEMP fuel


Vacuum tap changer

Raising voltage levels


800 kV DC


1100 kV DC; 1200 kV AC

Special applications


Subsea transformers


Ultralow noise


Power electronics traction transformer

High voltage products
Push on cost optimization and eco-efficient products

Innovations across product and voltage range

- Reliability
- Performance
- Efficiency
- Design and cost optimization
- Life cycle approach
- Eco-efficient products

Generator circuit breaker high efficiency; low maintenance; environmentally friendly

420 kV Gas insulated switchgear (GIS)
33% volume reduction
40% SF6 gas reduction

245 kV GIS
40% volume reduction
20% SF6 gas reduction

72.5 kV GIS
20% volume reduction
50% SF6 gas reduction

72.5kV CO_2 breaker
SF_6 gas alternative

BIOTEMP® instrument transformers with 97% biodegradable oil

Cryogenic SF6 gas recycling system

Medium voltage products
Focus on new technologies and local markets

New technologies

Relion 615 electronic relay (Europe & ANSI-US)

Thermoplastic embedded poles

Ultrafast earthing switch

DC Trac high speed railway circuit breaker

Serving local markets

ZN1 primary distribution switchgear (India)

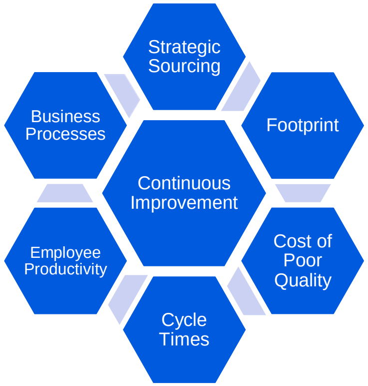
Safelink Ring Main Unit (India)

Gridshield recloser ANSI version (US)

ZSSG primary distribution switchgear (China)

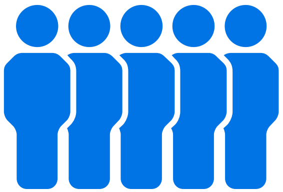
Continuous improvement
Critical to yield 5% annual productivity

Several areas of focus



Improving operational capability

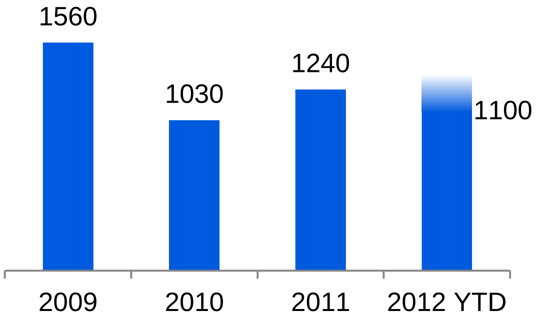
of employees trained since 2009



>1700

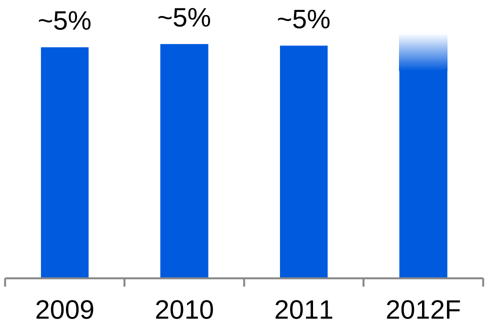
Collective idea generation

of OpEx projects initiated

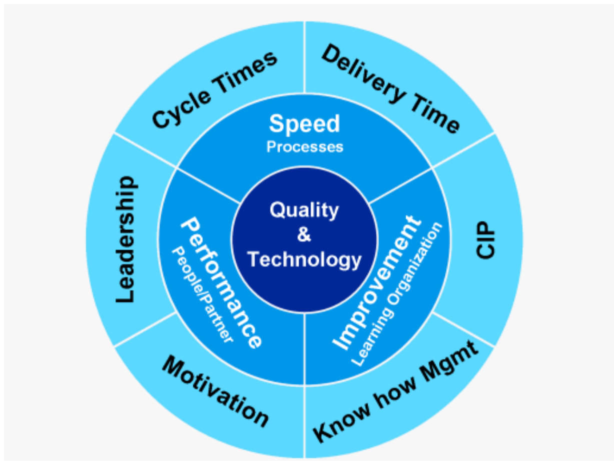


Ensures sustainable productivity

Savings as a % of prior year’s Total Cost



Driving productivity through lean manufacturing
Example of high voltage products factory



High voltage GCB factory, Switzerland
European factory of the year award 2010

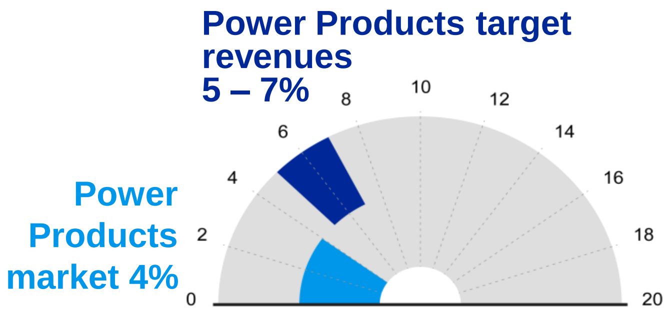
Delivery time	50% ↓
Production time	90% ↓
Production space	40% ↓
Production capacity	56% ↑
Storage area	66% ↓
Inventory	53% ↓
Net working capital	50% ↓
Full cost	26% ↓

Key power market drivers intact
ABB well positioned

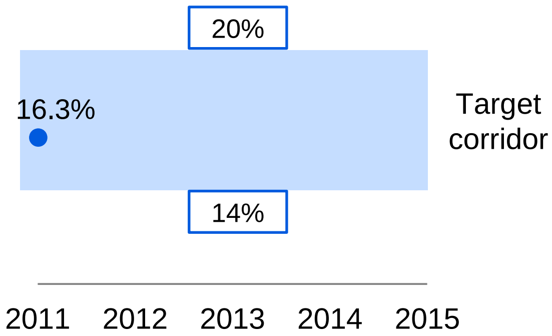
Key market drivers		Europe	Americas	Asia and MEA
Urbanization		Eastern Europe	South America	Increasing population Growing middle class
Energy intensive industries		Retrofits for efficiency	Oil and gas, metals and mining in South America	Major process industries
Remote bulk generation from renewables		Germany and UK offshore wind connections	Large hydro in South America	Large hydro, offshore wind and utility solar
Distributed generation		Interconnections Grid upgrades	Wind in key US states	Likely to come in India
Cost pressure, aging infrastructure		Drive for energy efficiency in T&D	Increasing power outages in US	Reduced blackouts
		Renewables, interconnections, grid upgrades	Grid upgrades, smart grids	Power capacity and infrastructure

Power Products
Differentiators driving consistent performance

Target revenue growth vs market 2011-15
CAGR base year 2010, % change in local currencies



Op. EBITDA margin target corridor 2011-15
% of operational revenues



Differentiating factors

- Comprehensive product portfolio
- Global footprint
- Large installed base for service
- Multiple channels to market
- Extensive geographic coverage
- Diversified end market exposure
- Penetration in key high growth markets
- Balanced exposure to economic cycles

To find out more information please refer to the following links

- New amorphous core transformers (Press release)
- World's most powerful ultra high-voltage direct current (UHVDC) converter transformer (Press release)
- New generation gas-insulated switchgear (GIS) (Press release)
- ABB Glossary

Power and productivity
for a better world™