

## Siemens Power Group in India

Juergen Schubert, President & CEO, Siemens Ltd - India A K Dixit, Vice President Marketing, Siemens PTD - India

Merrill Lynch Great India Industrial Tour March 21, 2006

#### **Safe Harbor Statement**



This presentation contains forward-looking statements and information – that is, statements related to future, not past, events. These statements may be identified either orally or in writing by words as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "will" or words of similar meaning. Such statements are based on our current expectations and certain assumptions, and are, therefore, subject to certain risks and uncertainties. A variety of factors, many of which are beyond Siemens' control, affect its operations, performance, business strategy and results and could cause the actual results, performance or achievements of Siemens worldwide to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. For us, particular uncertainties arise, among others, from changes in general economic and business conditions, changes in currency exchange rates and interest rates, introduction of competing products or technologies by other companies, lack of acceptance of new products or services by customers targeted by Siemens worldwide, changes in business strategy and various other factors. More detailed information about certain of these factors is contained in Siemens' filings with the SEC, which are available on the Siemens website, <u>www.siemens.com</u> and on the SEC's website, <u>www.sec.gov</u>. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described in the relevant forward-looking statement as anticipated, believed, estimated, expected, intended, planned or projected. Siemens does not intend or assume any obligation to update or revise these forward-looking statements in light of developments which differ from those anticipated.

## Siemens Power Group in India



#### **Provides in**

## Power Generation ...... solutions, systems, products and services for:

- Gas Turbine & Steam Turbine based Power plants
- Compressors for industrial applications
- Rotating equipment for the Oil and Gas Sectors
- I & C equipment & IT Solutions
- All electrical equipment including Excitation Systems for Generators

## Power Transmission and Distribution ..... solutions, systems, products, and services for:

- Turnkey Switchyards upto 765 kV
- HVDC & HVAC Transmission Projects
- High Voltage Switchgear upto 420 kV
- Power Transformers
- Medium Voltage Indoor, Outdoor Switchgear and Switchboards
- Power System Control, Energy Management Systems
- Protection Systems and Substation Automation



## **Country setup - Siemens Power Group**



#### Office Locations: 8x

Offices at Gurgaon , New Delhi , Mumbai , Kolkata, Chennai, Bangalore , Pune and Vadodara

#### Factories: 5x

- 1. PTD M , Kalwa : Medium voltage factory
- 2. PTD T, Kalwa: Greenfield Transformer factory under construction
- 3. PTD HS, High Voltage factory at Aurangabad
- 4. PG I, Industrial Turbine factory at Vadodara
- 5. PG I: Workshop for servicing small gas turbines at Bangalore

#### Other Companies: 2x

- 1. Siemens Power Engineering Pvt. Ltd. at Gurgaon.
- Siemens Industrial Turbomachinery Services Pvt. Ltd. at Bangalore

Number of Employees: ~1,350 ( as of Sept. '05 )



## **Country setup – Organisation**



PG group provides solutions for both Utilities and Industrial applications

#### **Power Generation Business** Industrial **Power Plant** Service **Development Applications** Instrumentation, Coal Fired Plants Utility and Steam & Gas plants **Control &** Industry Combined cycle upto 150 MW **Electricals** plants Compressors

Project Group Sugen (1100 MW)

Torrent Power Services Pvt. Ltd. (50% SAG holding) Demag Delavel Industrial Turbomachinery Pvt. Ltd.

(Merged in November'05)

Siemens Demag Delavel Turbomachinery Pvt. Ltd.

( Merged from July 1st 2004)

Siemens Power Engineering Ltd.

100% sub. of SAG

Siemens
Industrial
Turbo-machinery
Services Pvt. Ltd.

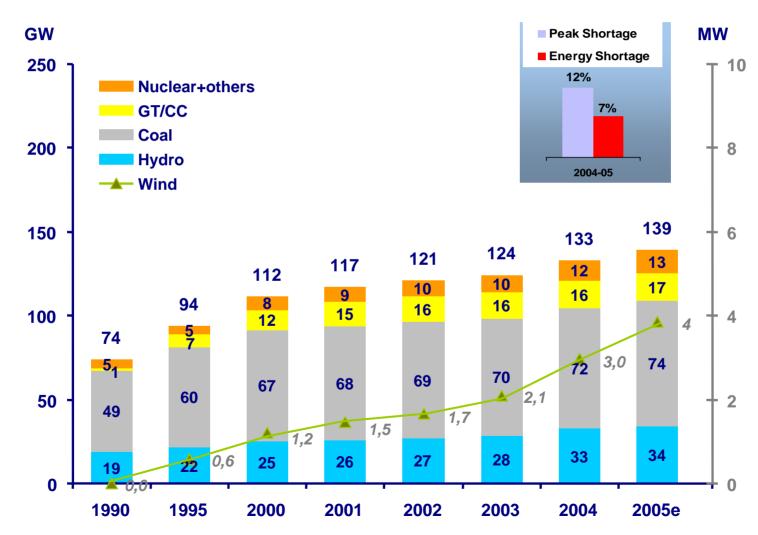
51% share by SL

## **Installed Power Generation Capacity in India**



5

Despite of large capacity addition supply remains lower than demand

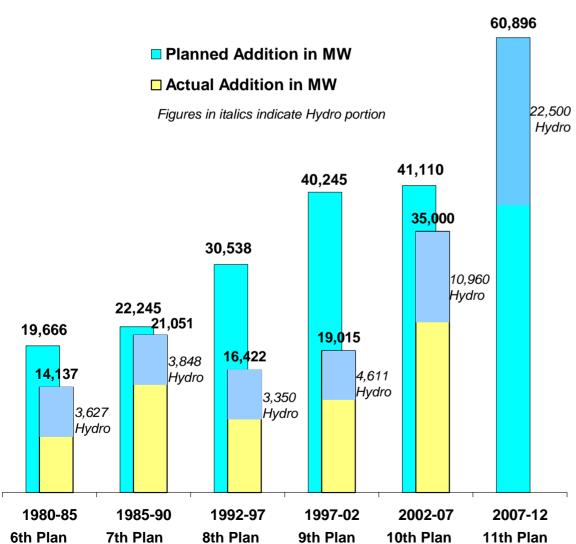


Siemens Power Group in India Source : SAG

## Planned Capacity Vs. Actual Addition



Investments of EUR 57 bn is estimated for generation sector in the 11th Plan (2007-12)



- ➤ Lowest capacity additions witnessed in 8<sup>th</sup> and 9<sup>th</sup> Plans vis a vis targets
- ➤ With the reforms initiated by the government the power sector, the power sector began to look up.
- ➢ Government's "Power for All by 2012" program has thrown up huge opportunity for the generation sector
- ➤ Actual Vs. planned capacity addition is expected to improve to 85% in the 10th plan from 47% in the 9th plan
- Between 2002 and 2012, a capacity addition of 100,000 MW has been planned

#### **Market Characteristics**



#### Power Generation sector at take off stage yet continues to be competitive

- Government committed to the reforms process in this sector.
- Financial resources a constraint.
   Private participation encouraged.
- Major world players are very active.
- Market is fiercely cost competitive.
- Local product development and value addition are key success factors.

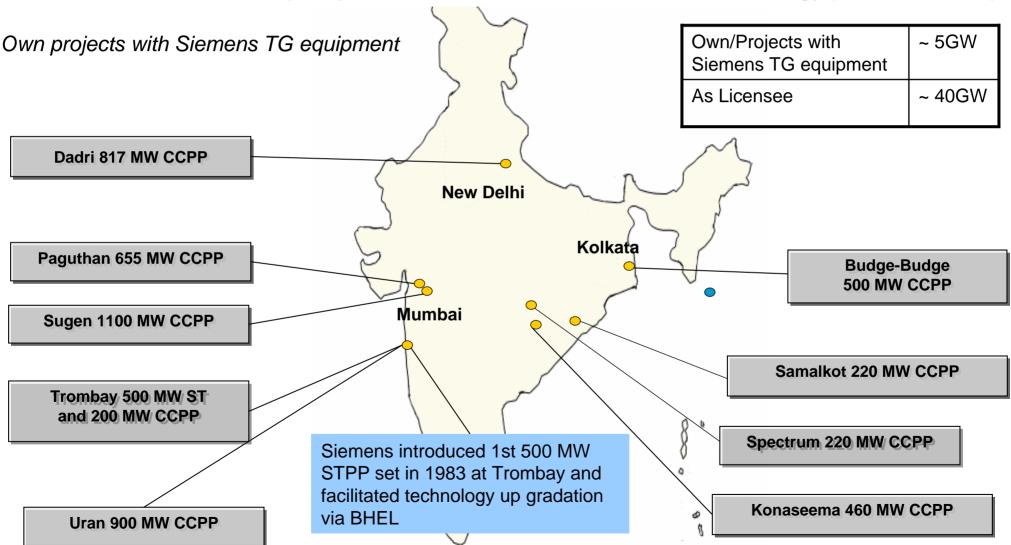
Siemens PG has geared itself to meet these market trends.

- Industrial Turbines factory at Vadodara to take advantage of the growth in the industry sector.
- Our in-house developed state of art
   "Distributed Control Systems" for Power
   Plants suitable for low cost Asian / African
   markets , with 18 MW installed base in India.
- Our vendor base and project management skills will help us in developing as a product and system supplier.

### Siemens Fossil power plants in operation/construction



In India ~ 35% of installed capacity are installed in India with Siemens technology (own & licencee)



## Siemens Industrial Applications projects



More than 60% of the Industrial Turbines in India are based on Siemens technology

**ABAN 1x 55 MW** 

An extract of projects Reliance PTA -Compressor + ST train Hindalco 2 x 84 MW **New Delhi** Essar 1 x 57 MW Gurgaon Kolkata **Petronet LNG** 3 x 8 MW Mumbai Hirakud 1x 100 MW 1 x 100 MW **Shell Hazira** 3 x 8 MW Aarti 1x 40 MW Chennai Jindal 1x 100 MW Bhushan 1x 40 MW 1 x 130 MW

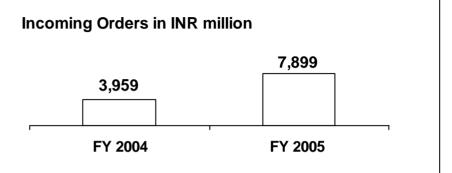
- Over 400 Siemens industrial steam / gas turbines with a capacity of 3,200 MW have been installed in India.
- More than 140 Siemens compressors operating in India.
- Siemens India acquired the industrial steam turbine business of Alstom as per the world-wide strategy.
- Siemens India also acquired 51% share in an industrial Gas turbine service facility to enhance service capability

## Siemens PG at a glance

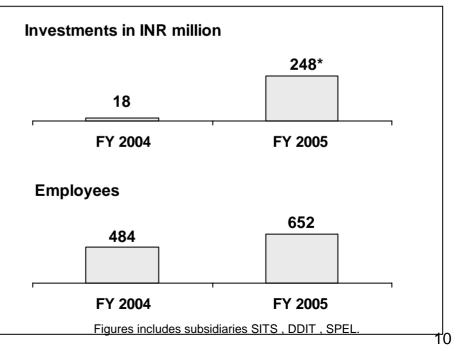


#### Siemens PG is gearing itself to meet market growth

- Siemens is successful in acquiring the 1,100 MW Sugen CCPP project being setup by the Torrent group.
- Power Plant Automation and Service businesses registered 35% increase in their business volumes while maintaining double digit profitability



- Siemens has acquired 100% shareholding in Demag Delavel Industrial Turbomachinery Pvt. Ltd. (DDIT) which was engaged in manufacture and marketing of industrial turbines upto 150MW
- Siemens acquired 51% stake in Pimac Engineering and Services Pvt. Ltd. Pimac has a well established service centre at Bangalore for service of Small Gas Turbines and Rotating Equipment



## **PG Factory – Industrial Turbines**

# SIEMENS

#### Factory for Industrial Turbines to meet growing industry demands



DDIT integrated with Siemens Ltd. In Oct.'05 Old Factory for Industrial Steam Turbines at Vadodra leased from Alstom

- Factory area: 2,700 sqm.
- Assembly Capacity: 26 Steam Turbines p.a.
   ( range 8 to 45 MW )
- Employees ~ 105

New Factory/office construction in progress.

- Target: To be operational by October 2006
- New Factory Area: 60,000 sqm. (land)
   9,000 sqm. (shop & office)
- Capacity:43 Steam Turbines & 14 Condensers p.a.
- Employees ~ 200

## Strategy in PG



Siemens PG group plans to be a leading player in India together with our parent company

#### **Own Businesses**

- Further investments at the Industrial Turbine factory to enhance capacity
- Develop 'Global Service Resource Base' in India for local and export services
- Strengthen design and engineering capabilities in power station automation.

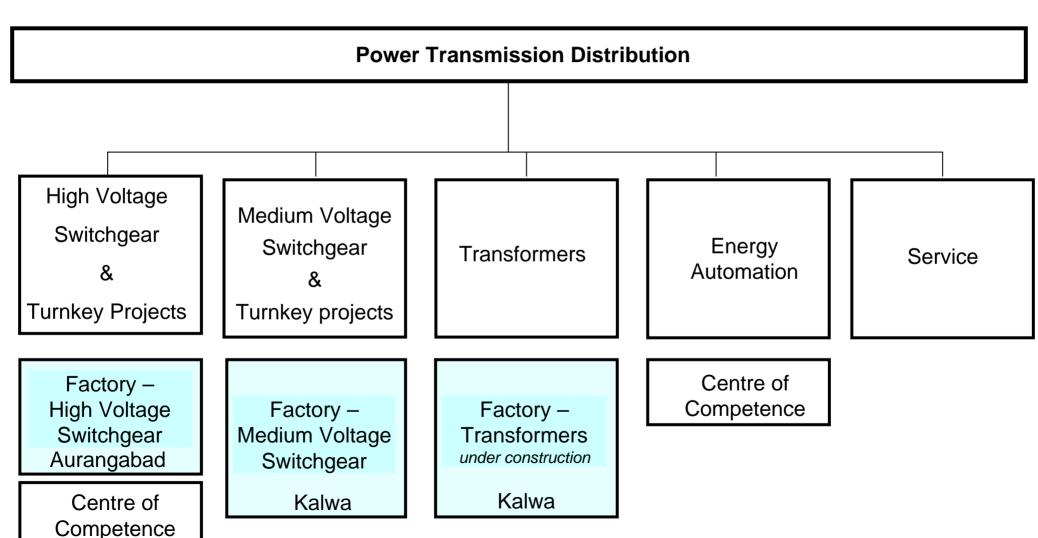
#### **Together with Headquarters**

- Facilitate introduction of 800 MW STPPs, based on super critical technology in India
- Aggressively pursue select power projects in IPP Sector
- Invest in manufacturing facility at Vadodara to become a component sourcing point.
- Strengthen global engineering resource for 'Power Station Design & Engineering'

## **Organisation - PTD Group**



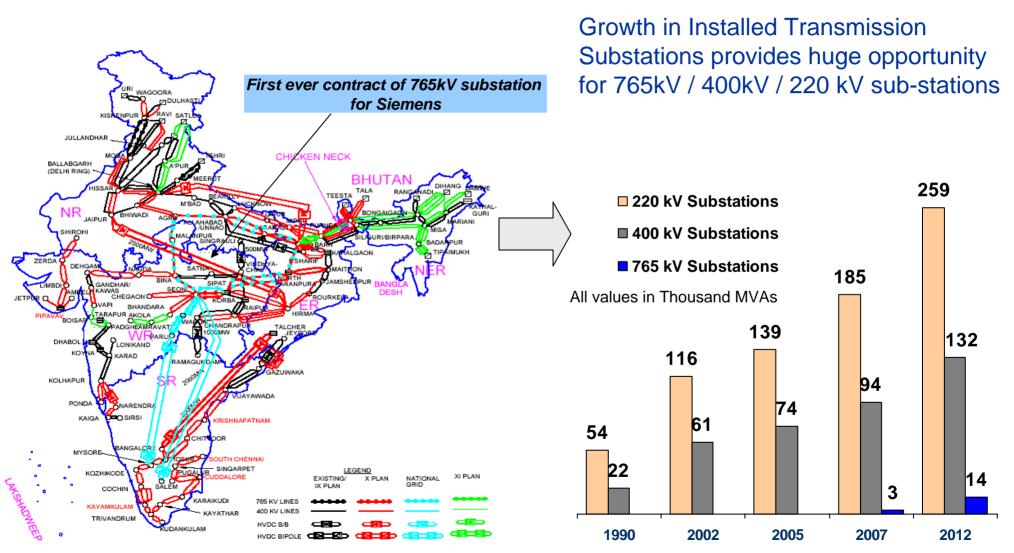
PTD group provides solutions for Medium to Extra High Voltage Transmission and Distribution



## Creation of Transmission Super Highways will boost the requirement for transmission substations



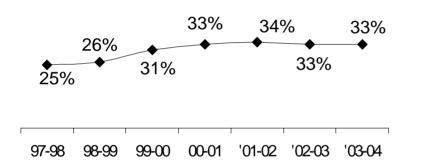
Planned Investment outlay of >EUR 36 bn upto 2012 in T&D Sector



### Major investments for reducing T&D losses in India



#### Transmission and Distribution losses in India



- Poor financial health of State electricity boards (SEBs)
- Huge gap existed between cost of generation and payment collections due to high aggregate technical and commercial (AT& C) losses
- Technical losses on account of inadequate investments for distribution infrastructure improvement lines and overloading of equipments
- Commercial losses due to low metering efficiency levels and power theft

#### **Government initiatives**

Distribution reforms identified as the key to improvement in the Power sector

#### **Objectives**

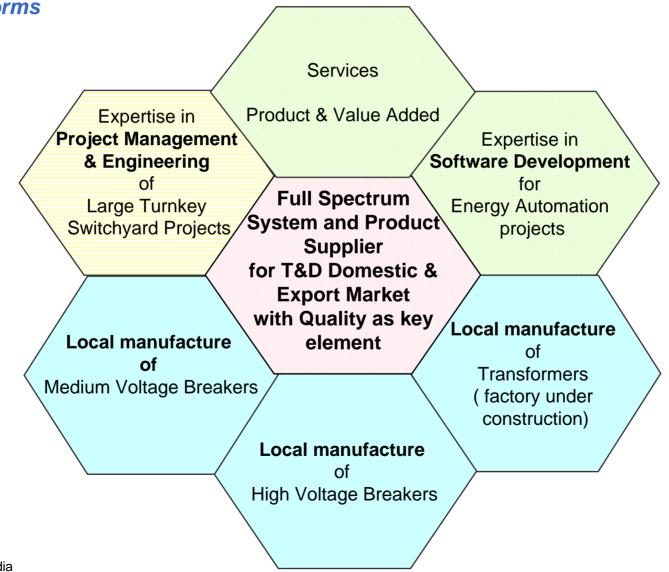
- Improve financial viability of SEBs
- Reduce the AT&C losses to 10%
- Reduce outages and power interruption
- Enhance customer satisfaction

15

### PTD now geared up as a "System and Product Supplier"



With full range of products and engineering capability, Siemens is poised to take advantage of the Market Reforms



#### Our Medium Voltage Switchgear set up at Kalwa

# SIEMENS

#### Global sourcing factory for Medium Voltage Outdoor Circuit breaker





Location: Kalwa

Established: 1973-74

Floor Area: 15,000 sqm.

No. of Employees: 400

- Second largest medium voltage factory outside Germany
- Recognized as Center Of Technology and Center of Competence by Siemens AG
- Technology Collaboration Agreement (TCA) with Qatar (QGS),Oman(Al Hassan), Malaysia(Item Engg.) & Bangladesh(Siemens) for Medium Voltage switchboards

## Our High Voltage Switchgear at Aurangabad



State of art factory for High Voltage Breakers helped us in our turnkey projects



145 kV 245 kV 420 kV

Location: Aurangabad

Established: 1999-00

Floor Area: 5,700 sqm.

No. of Employees: 40

#### **Main Products:**

72.5 KV/145KV/245KV SF6 Circuit breakers

#### **New Products:**

 400KV SF6 Circuit breakers (under development)

## Our success in High Voltage Turnkey Projects



#### **Offering Turnkey Solutions**

☐ All Substations up to 800kV.

First ever contract for 765kV substation.

One of the largest 400/220 kV substations on reference.

☐ GIS Substations up to 400kV.

First turnkey station of 220 kV substation

commissioned

HVDC and FACTS System.

One of the largest 400kV HVDC station on reference

(2000MW)

Local Competence for 400kV FSC stations.

#### Responsible for

Qatar, Oman, Yemen, Bahrain.

Bangladesh, Nepal, Bhutan, Sri-Lanka

#### Completed 325 bays from 1998 to 2004



## **Success in Large Export Projects**





#### **Innovations and New Products**



#### PTD has realized potential & we have defined a common strategy . .

PTD has expanded its served market by systematically adding products one after another . .

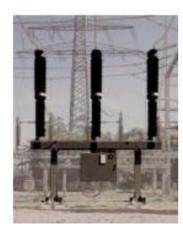
And with a well laid out strategy to achieve competitiveness thru 'Local Value Addition'





Medium Voltage Vacuum Breakers And Switchboards

2001



High Voltage Circuit Breakers 72 kV to 245 kV

2005



Ring Main Units

2006



Power Transformers

## **New Transformer Factory at Kalwa**



#### The Transformer factory will improve our Product Portfolio



Location: Kalwa

Established: Under construction

Floor Area:15,000 sqm.



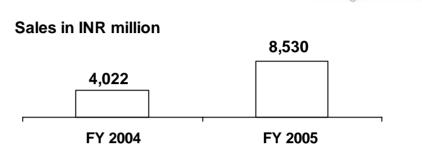
- Investment of €28 mn in the new facility.
- State of art factory will go on stream in this fiscal year.
- Production of Power Transformers for domestic and export markets up to 800kV and 600 MVA ratings.



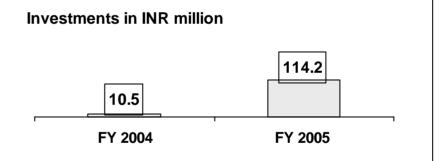
## Siemens PTD performance at a glance



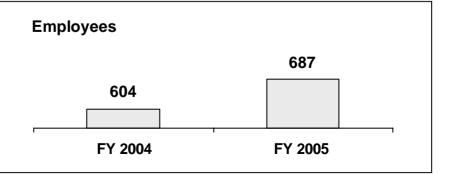
- Sales have more than doubled as compared to last year
- Competitive cost, quality and reliability were major factors for growth both in local and export markets



 Major investments foreseen in FY 2007 for the Transformer factory which will expand our product palette.



 Our employees are our strength and we continuously invest in their training and development.



## **Our Strategy in PTD**



PTD is a success story of teamwork between headquarter and regional company

- PTD systematically adding products to expand its portfolio.
- PTD India becoming full spectrum supplier for PTD Products and Systems by setting up world class factory for Transformer, High voltage breakers and other High voltage products.
- PTD India will leverage Project Management Competencies in Engineering, Procurement and Construction (EPC) with base in India for growth in Domestic as well as Export markets.
- PTD India shall maintain technology lead by having state of art products and technology driven projects like HVDC for bulk power.

## **Summary**



 Power Sector Market registering double digit growth with huge investments planned by the government and the private sector

 With the large installed base, excellent quality image and broad product portfolio Siemens has geared up and positioned itself to take full advantage of the growth in the product as well as turnkey project market

 Our Project Management and Engineering skills will be leveraged by Siemens Germany for capturing export projects

#### Reconciliations and definitions



"Group profit from Operations" is reconciled to "Income before income taxes" of Operations under "Reconciliation to financial statements" on the table "Segment information." See "Financial Reports/Fiscal 2005, Quarter 4 / Financial Statements" at our Investor Relations website under www.siemens.com

"ROE" (Return on equity) margin for SFS was calculated as SFS' income before income taxes divided by the allocated equity for SFS. Allocated equity for SFS as of September 30, 2005 was €983 million. See also Siemens' Form 20-F at our Investor Relations website under www.siemens.com

The allocated equity for SFS is determined and influenced by the respective credit ratings of the rating agencies and by the expected size and quality of its portfolio of leasing and factoring assets and equity investments and is determined annually. This allocation is designed to cover the risks of the underlying business and is in line with common credit risk management standards in banking. The actual risk profile of the SFS portfolio is monitored and controlled monthly and is evaluated against the allocated equity.

Siemens ties a portion of its executive incentive compensation to achieving economic value added (EVA) targets. EVA measures the profitability of a business (using Group profit for the Operating Groups and income before income taxes for the Financing and Real estate businesses as a base) against the additional cost of capital used to run a business, (using Net capital employed for the Operating Groups and risk-adjusted equity for the Financing and Real estate businesses as a base). A positive EVA means that a business has earned more than its cost of capital, and is therefore defined as value-creating. A negative EVA means that a business is earning less than its cost of capital and is therefore defined as value-destroying. Other organizations that use EVA may define and calculate EVA differently.

A reconciliation of EVA may be found on our Investor Relations website under <a href="www.siemens.com">www.siemens.com</a>

## Siemens Investor Relations Team



Marcus Desimoni	+49-89-636-32445	
Frank Heffter	+49-89-636-34095	
Irina Pchelova	+49-89-636-33693	
Christina Schmöe	+49-89-636-32677	
Susanne Wölfinger	+49-89-636-30639	

Webpage:	http://www.siemens.com → Investor Relations
e-mail:	investorrelations@siemens.com
Fax:	+49-89-636-32830