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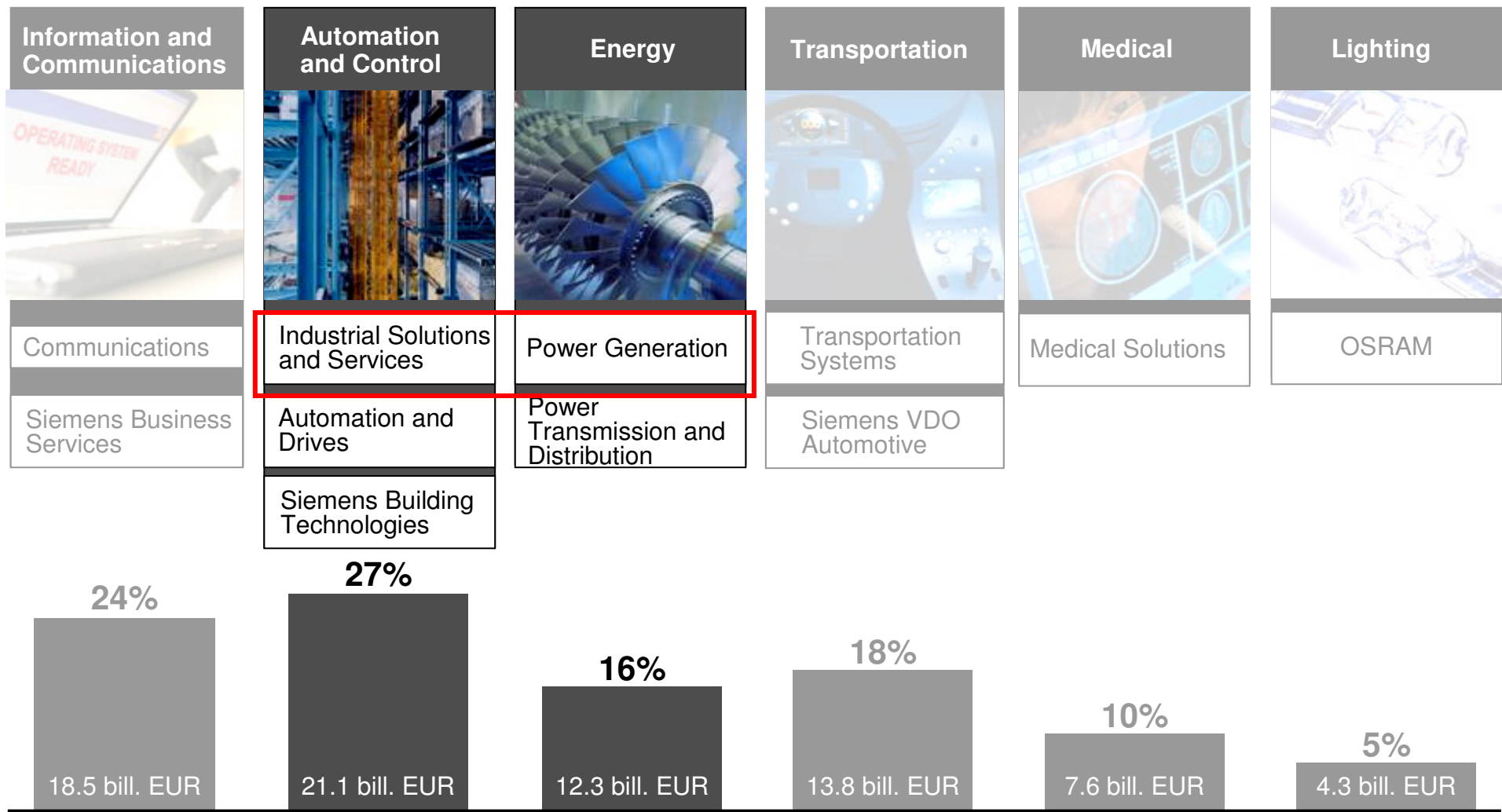
Industrial Solutions and Services

Strasbourg, 14 September 2006

Geothermal Turnkey Power Generation Solutions by Siemens

Siemens is active in six business areas

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Total sales of Operations Groups excluding Other Operations

Geothermal Turnkey Power Generation Solutions by Siemens

Our worldwide installed base

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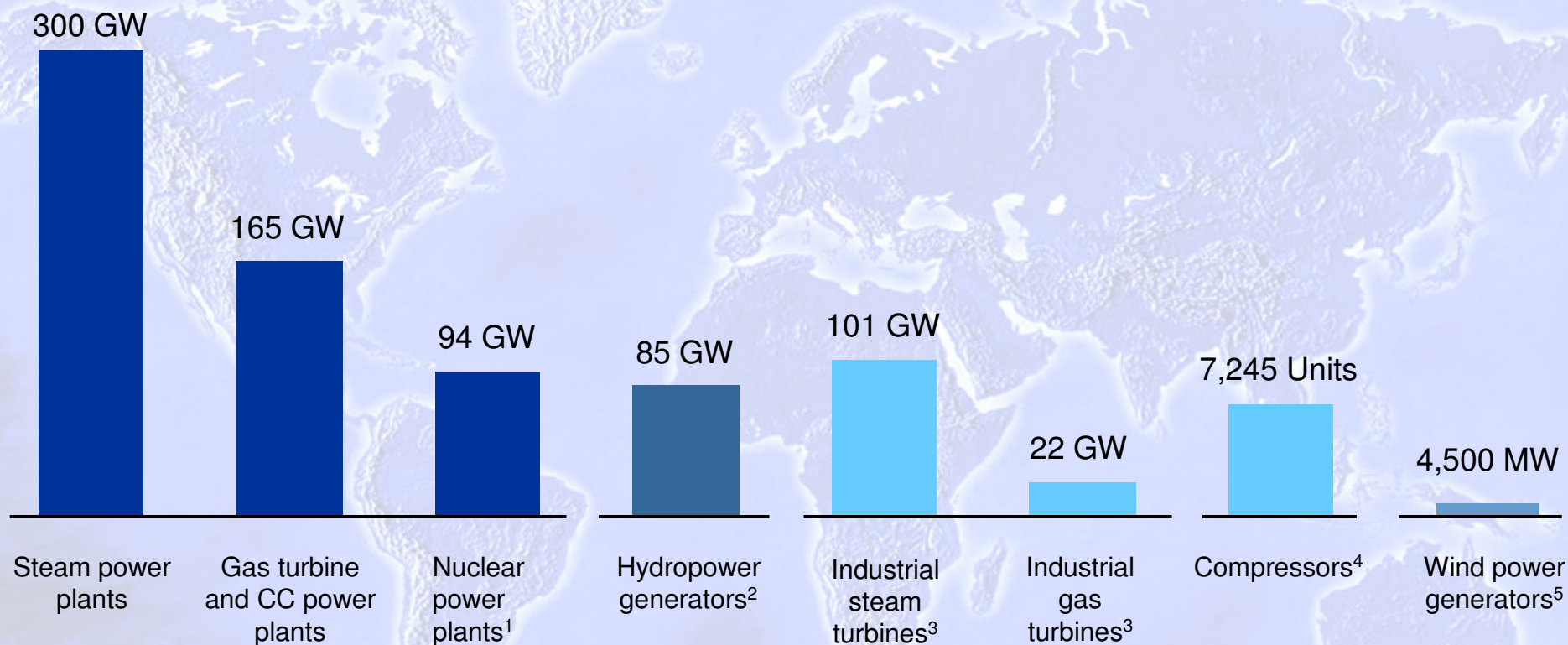
Installed capacity worldwide: **771,500 MW**

Fossil & Nuclear

Hydro

Industry & Oil and Gas

Wind



1) Siemens nuclear business through joint venture Areva NP as of January 2001 (Siemens share 34 %)

2) Voith-Siemens-Hydro Power Generation joint venture as of April 2000 (Siemens share 35 %)

3) Acquisition of Alstom Industrial Turbines in August 2003

4) Acquisition of Demag Delaval Industrial Turbomachinery in October 2001

5) Acquisition of Bonus Energy in December 2004

Turnkey competence: Solutions in all phases of a plant project

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Planning

- Feasibility studies
- Financing packages
- Licensing procedures
- Permitting procedures
- Overall plant concepts

Service & Expansion

- Service agreements
- Preventive & corrective maintenance
- Performance improvement programs
- Training & Consulting

Construction

- Project management
- Components & systems
- Turnkey plants
- Commissioning

Operation

- Operating agreements
- I&C and IT solutions
- Monitoring
- Diagnostics

Heat Recovery: Areas of Application

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Automation
and Control



Automation and
Drives

Industrial
Solutions and
Services

Siemens Building
Technologies

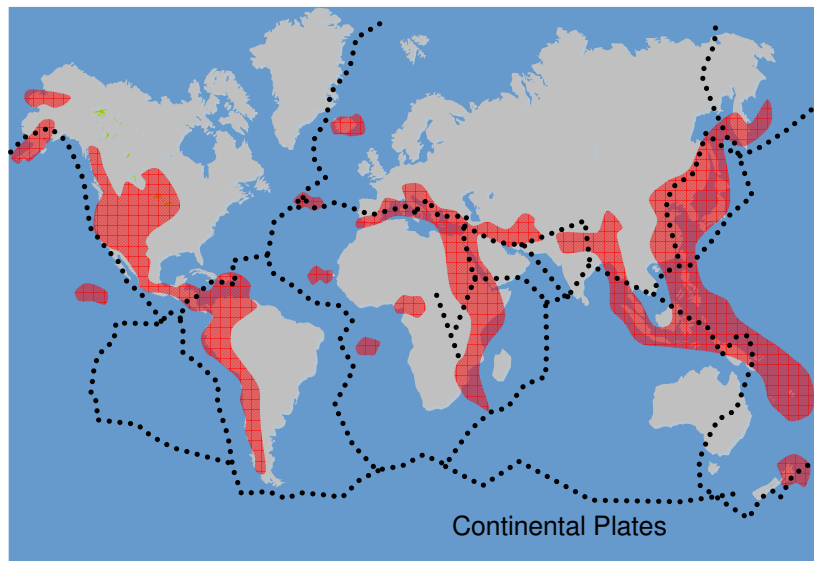
27%

21.1 bill. EUR

Heat Recovery

Geothermal Solutions

Countries with geological potential,
attractive subsidy mechanisms
& strong local Siemens presence



Industrial Waste Heat

Energy-intensive industries,
locations with high energy costs
& strong local Siemens presence

Cement



Iron & Steel



Aluminium



Glass



Oil & Gas



Marine



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Experience from Sumitomo, Kashima Steelworks (Japan)

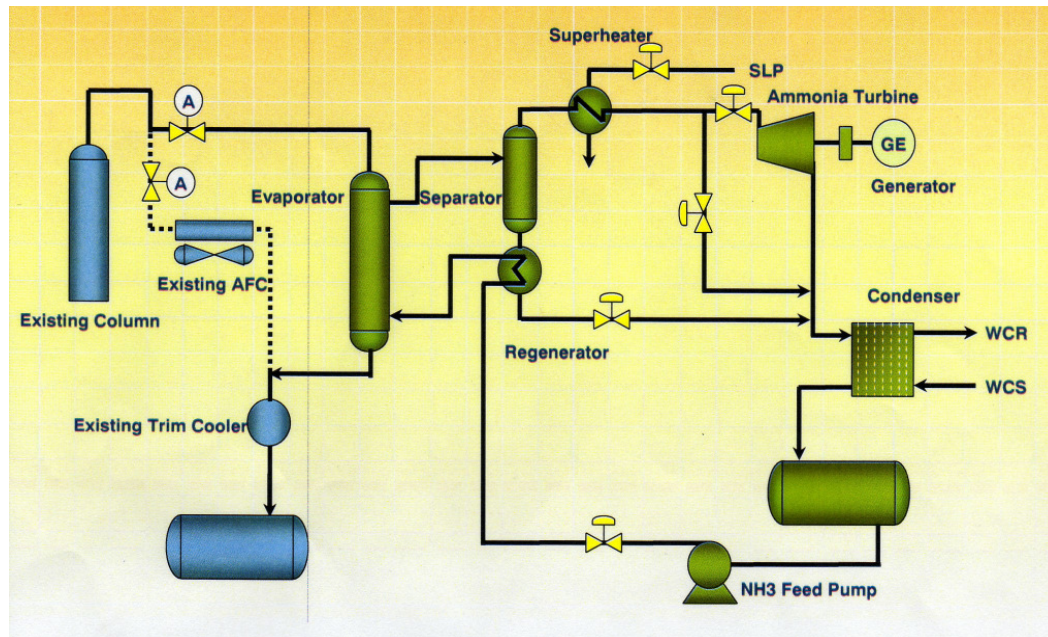
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- Waste heat in a steel plant → wastewater used to cool off-gas from converters
- Kalina-based WHR-Plant is running trouble-free since 1999
- 3.5 MW electrical power output, measured power corresponds to Heat Balances
- Availability ~100% (power production coupled to steel plant availability)
- Legal requirements require turbines to be opened every 4 years → No findings
- Operation in of “Steel Works-like” conditions; trouble-free



Experience from FujiOil Hydrocarbon facility (Japan)

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- Waste heat in a hydrocarbon plant
- Kalina-based, Operational since September 2005
- 3.9 MW electrical power output, measured power corresponds to Heat Balances
- Availability nearly 100%
- Built by Chiyoda / Recurrent Engineering

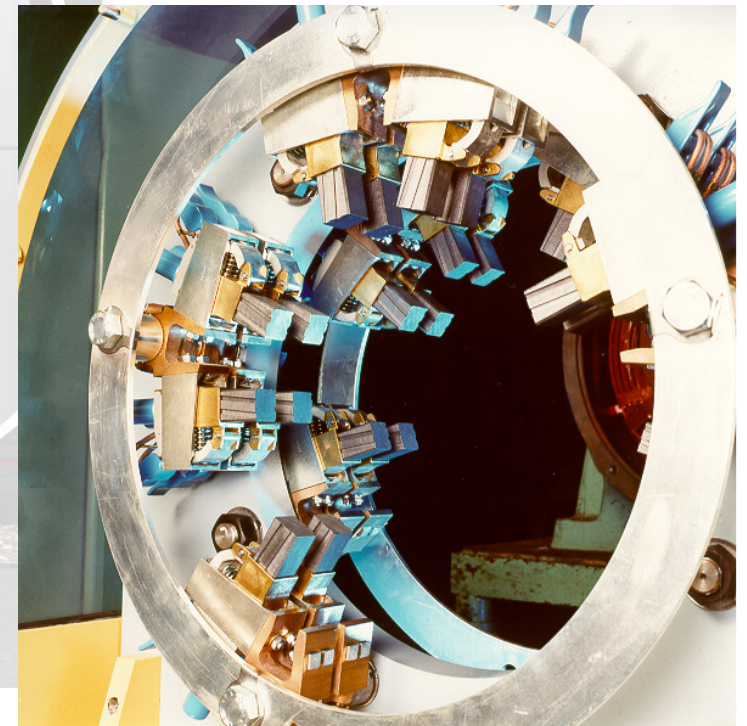
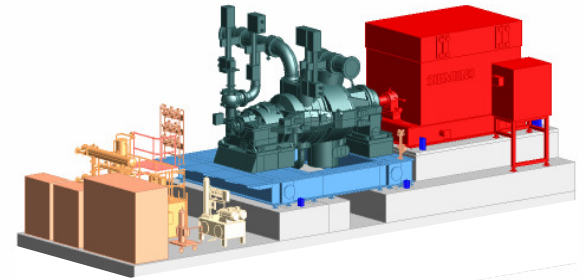


Geothermal Turnkey Power Generation Solutions by Siemens

High quality, reliable and proven components

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- Use of highly efficient turbines
- Machines capable of handling water-ammonia
- All components proven in power plants and refrigeration industry
- Material selection for critical components based on extensive tests at Siemens testing facility
- Main components from Germany/EU
 - crucial for service & reliability
- State-of-the-art solution with Siemens electrical and instrumentation & control systems



Geothermal Turnkey Power Generation Solutions by Siemens

Kalina projects in the making

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<u>Application</u>	<u>Supplier</u>	<u>Location</u>	<u>Phase</u>	<u>Scope of supply</u>	
Geo	AMP Recurrent/ Siemens	Milford, UT, USA	construction	Turnkey Project with Siemens Turbine	45 MW
Geo	Siemens	Unterhaching	construction	Turnkey Project with District Heating	3,4 MW
Geo	Siemens	Bellheim	drilling	Turnkey Power Plant	6,4 MW
Geo	Geodynamics / Recurrent	Innamincka / Australien	construction	Hot Fractured Rock Demonstr. Project	2,5MW
Geo	AMP Recurrent / GE	Saltwells, Fallon, NV, USA	construction	Turbine	17 MW
Geo	AMP Recurrent / GE	Stillwater, Fallon, NV, USA	construction	Turbine	34 MW
Geo	AMP Recurrent	Surprise Valley, CA, USA	construction	Turnkey Power Plant	17 MW

Geothermal Turnkey Power Generation Solutions by Siemens

Geothermal power plant in the Upper Rhine Valley in Germany

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Geothermal power plant currently under construction in Germany

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Geothermal Turnkey Power Generation Solutions by Siemens

- Siemens is one of the leading suppliers of power plants in world
- Turnkey provider of power generation facilities
- Extensive After-Sales Service network to ensure lasting performance
- Strong commitment to deploying and developing efficient technologies in the renewable energies area
- Credibility
- Reliable and long-term partner

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Industrial Solutions and Services

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Thank you very much for your attention.