

# Vattenfall Capital Markets Day 2007

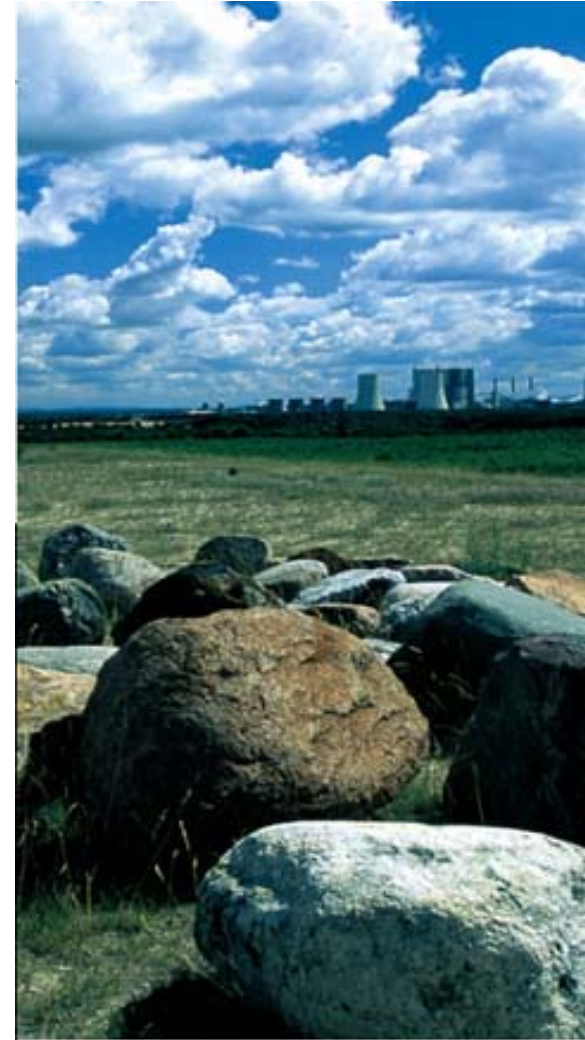
Presentation by

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Stockholm, 24 September 2007

# Content

- Market positions in Germany
- Key issues and challenges
- Investments
- Summary



# Germany: market positions (1)

Installed capacity (MW)			Electricity generation (TWh)		Transmission grid	
RWE	33,264**	23.8%	Total Germany***	596	RWE	32,3% (11,343 km)
E.ON	26,003**	18.6%	Public Supply***	504 (84.6%)	E.ON	30,1% (10,570 km)
Vattenf	15,855 *	11.4%	Industry***	47 ( 7.8%)	Vattenf	27,2% ( 9,540 km)
EnBW	14,811**	10.6%	Private***	45 ( 7.6%)	EnBW	10,4 % ( 3,647 km)
Others	49,606	35.5%				
<b>Total</b>	<b>139,539***</b>		<b>Vattenfall is no. 3 in Germany with 81.5 TWh* (13.7%)</b>			

Source: Publication of TSO

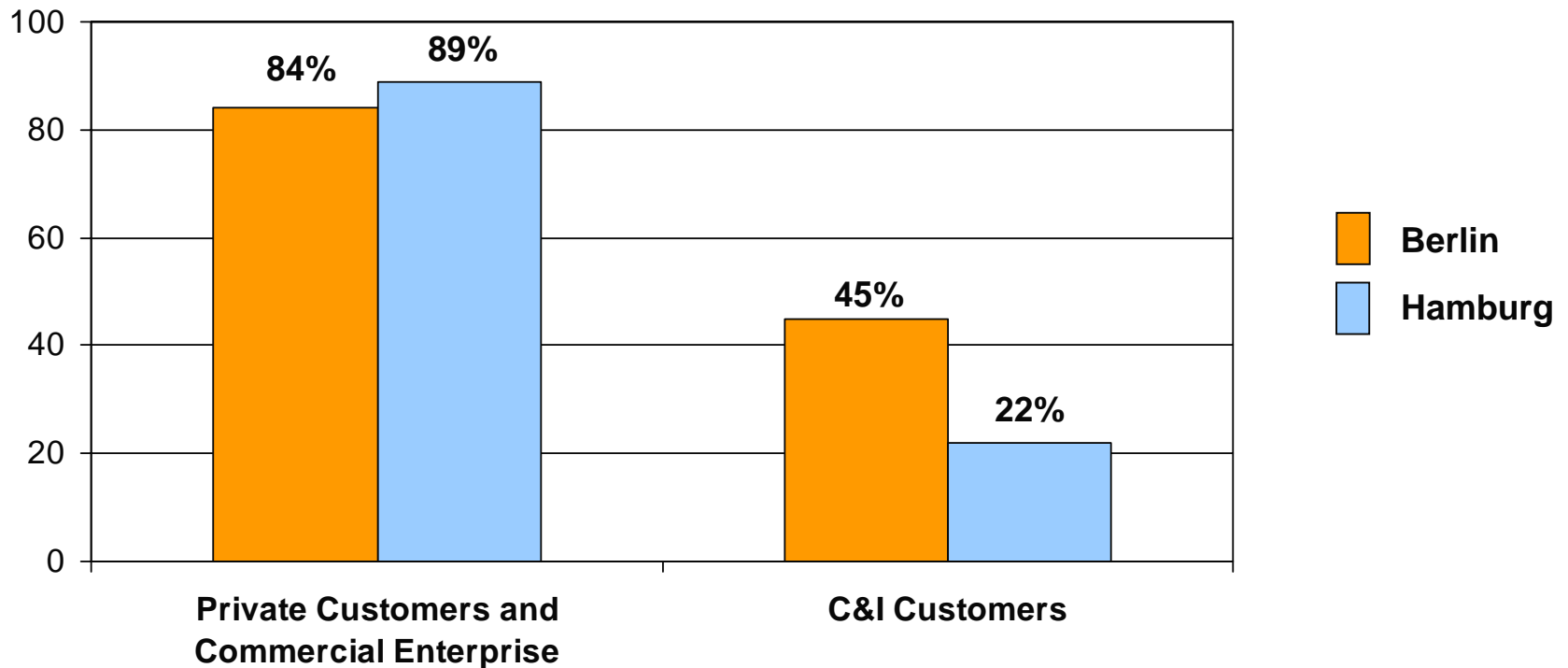
\*) pro rata share, source Vattenfall Annual Report 2006

\*\*) publication of utilities

\*\*\*) VDEW, Der deutsche Strom- und Energiemarkt auf einen Blick, 2007

# Germany: market positions (2)

Vattenfall's market shares in Berlin and Hamburg, June 2007



# Key data

<i>IFRS</i> <i>Amounts in SEK billion</i>	<b>H1 2007</b>	<b>H1 2006</b>	<b>% Change</b>	<b>LTM</b>	<b>FY 2006</b>	<b>FY 2005</b>
<b>Net sales</b>	56.6	51.0	+11.1	107.2	101.5	105.0
<b>EBIT *</b>	8.8	9.3	-5.8	12.3	12.9	10.3
<b>Net assets **</b>	65.7	66.1	-0.6	n.a.	61.8	68.7
<b>Electr. generation, TWh</b>	35.8	38.9	-8.0	73.2	76.2	75.9
<b>Heat generation, TWh</b>	7.4	9.9	-25.3	13.1	15.5	15.4
<b>Employees ***</b>	19 590	19 654	-0.3	n.a.	19 821	20 096

\* Excl. items affecting comparability (IAC)

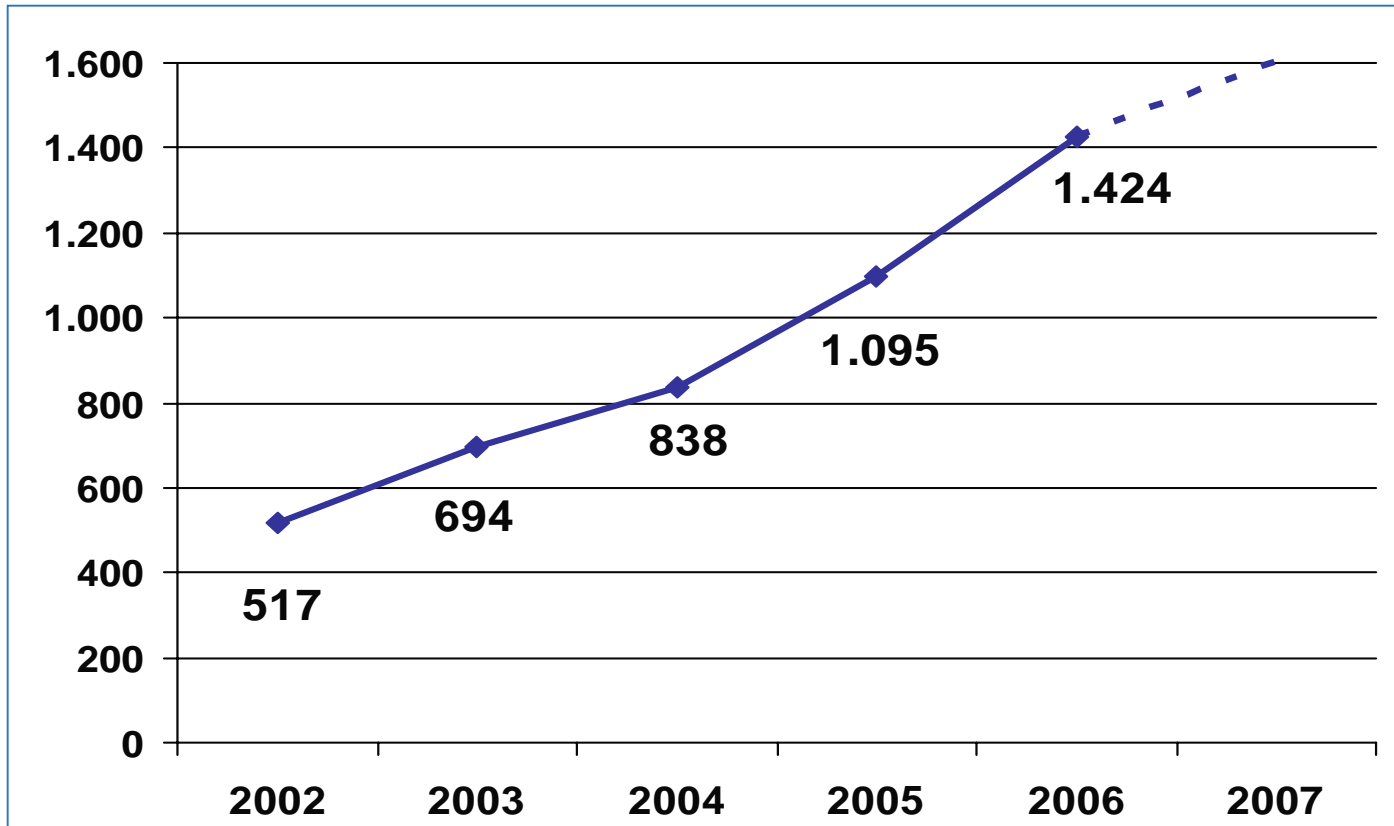
\*\* At the end of the period

\*\*\* Full time equivalents (FTE)

LTM = last twelve months

# EBIT development 2002 - 2007

EUR million



EBIT excl. IAC  
(Items affecting  
comparability)



**EBIT within five years almost three times as high as a result of cost savings and higher wholesale electricity prices**

# June 28 2007: outages at nuclear power plants

## Brunsbüttel



Short circuit in a switchyard outside the plant

- Extensive and very critical media coverage
- Significant loss of public trust
- Both plants are still off line
- Both events classified as zero (0) on the international INES-scale

## Krümmel



Fire in a transformer outside of the reactor building

# Restoring trust

**Restoring lost credibility and trust is a prerequisite for future success in Germany**

## **Strategy:**

Long-range action plan for resetting of communicative channels

- Phase 1: Assess the crisis      accomplished
- Phase 2: Take the initiative      ongoing
- Phase 3: Restore trust      medium to long-term objective



# Trust initiative

## 1. Communication

- „Open book policy“ with stakeholders
- Active dialogue: public/media/politics

## 2. Nuclear power plants

- Clarify technical circumstances
- Optimize communications / structures

## 3. Customers

- Active strategy to regain customer trust and satisfaction
- Objective: to increase market shares
- Launch Vattenfall's product campaign throughout Germany



# Challenge I: nuclear power plant optimization

- Assessment of technical shortcomings
- Improve incident management
- Improve communication control room
- Further development of staff qualification
- Improve communication channels



# Challenge II: customer development

- Examination of products, prices and market positioning
- Establishment of external expert group for sales and marketing
- Establishment of customer advisory council
- New marketing campaign launched today



# Investments I: generation

## Hamburg Tiefstack

130 MW gas-steam-  
CHP-power plant  
operational in  
2007/2008  
capital expenditure  
€100 million

## Hamburg-Moorburg

1,640 MW hard coal-  
CHP-power plant  
operational in 2012  
capital expenditure  
€1.7 billion



## Rüdersdorf

30 MW waste power plant  
operational before 2008  
capital expenditure  
€111 million

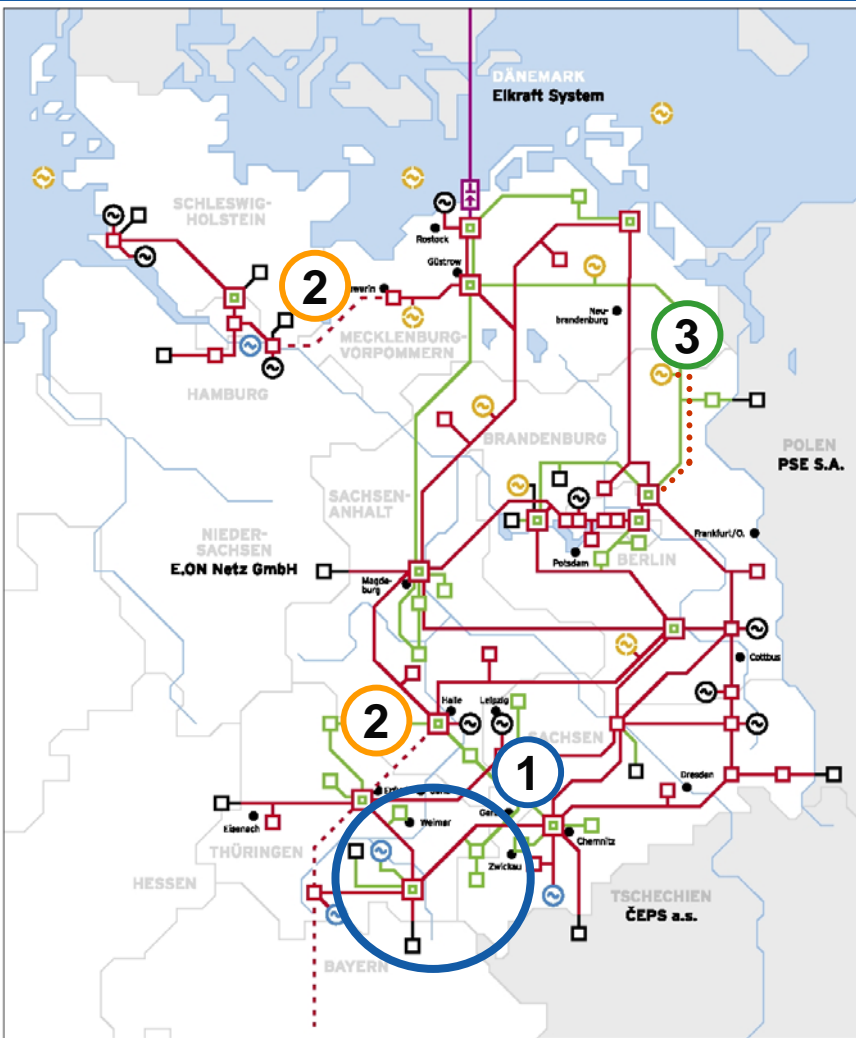
## Berlin

CHP- power plant  
operational post 2012

## Boxberg

675 MW lignite power  
plant  
operational in 2011  
capital expenditure  
€800 million

# Investments II: transmission grid

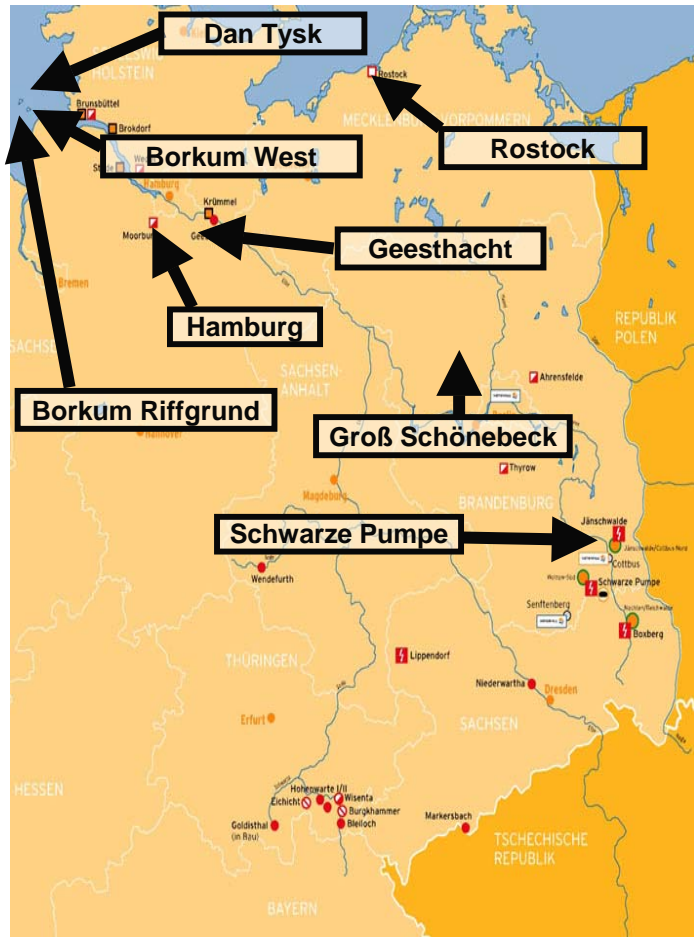


## Extensive grid investment program

- 1** Southwest re-enforcement: Southern part completed in 2006.  
Investment: **EUR 34.5 million**
- 2** Extension of transmission grid in the North: New connection to Hamburg's transmission grid (**Northern Line**), to be completed in 2007  
Southern Part: New connection to E.on Grid (**Thuringian Power Bridge**), to be completed in 2011.  
  
Total investment: **EUR 258 million**
- 3** 380 kV re-enforcement of **South-Uckermark**  
Investment: **EUR 129.3 million**



# Investments III: renewable energy / R&D



## Renewable energy / R&D projects

- Offshore-wind (Borkum West, Borkum Riffgrund, Dan Tysk)
- Geothermal Energy (Groß-Schönebeck)
- CO<sub>2</sub>-free power plant
- Hydro power (Geesthacht)
- Fuel cell (HafenCity Hamburg)
- Waste combustion plant (Rostock)

All investments (except Geesthacht) are decided or are ongoing projects

# R&D: cornerstone in building of CO2-free power plant

- **20 Sept 20, 2007:**  
Boiler Assembly in construction process of the world's first pilot CO2-free power plant
- **Core element** in oxyfuel process, weight: 230 t, height: 25 meters
- **The project's total investment sum:**  
EUR 70 million to build 30 MW pilot plant due to start operations in 2008 after three-year research phase
- **Second step in the project:**  
Planning and building of one or more demonstration plants in Germany's Lusatia area (capacity of ca. 300 MW)



# Summary

- + Continued strong financial development
- + Substantial investment programme ahead
- Loss of public trust following nuclear incidents

## Challenges

- Restore trust in Vattenfall
- Secure and develop our market position
- Enhance public acceptance for our investment strategy and our projects



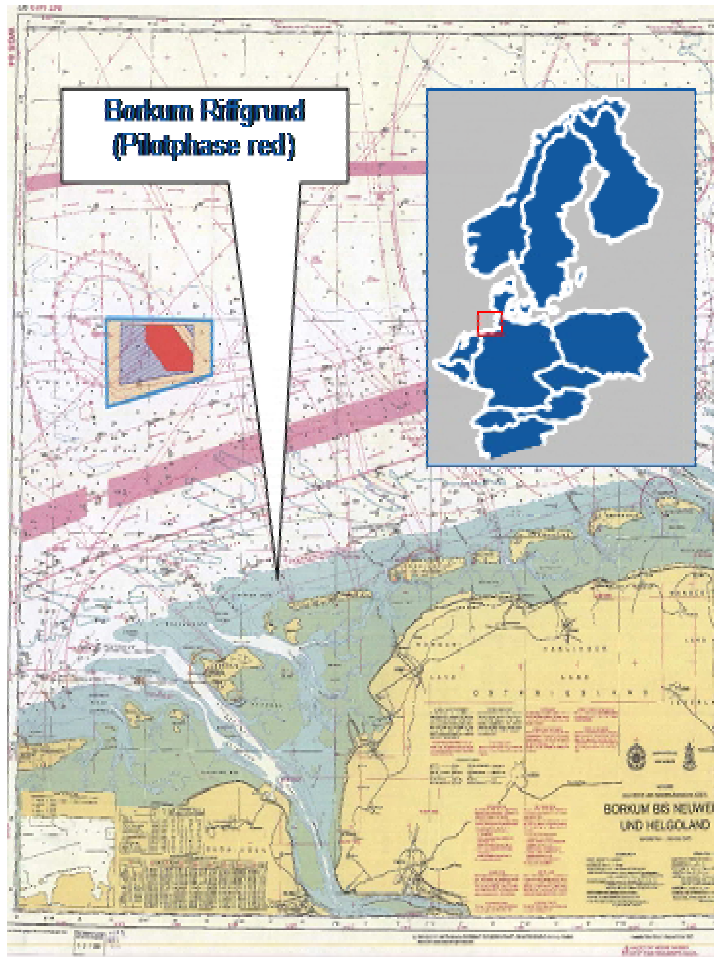
# Back up slides

# Offshore I: wind farm “alpha ventus” (DOTI)

- Vattenfall Europe, E.ON Energie and EWE have signed a contract for delivery and construction of 6 windpower mills (5 MW/mill)
- **Location:** The wind mills will be built 45 km off the coast of Borkum in 30 m depth of water
- **Total investment:** approx. EUR 180 million
- **June 2007:** Start of realisation phase of first German offshore windfarm „alpha ventus“(North Sea)
- **Late Summer 2008:** Start of connecting windpower mills to network (current planning)



# Offshore II: windfarm Borkum/Riffgrund



- **Location:** approx. 38 km north of Borkum, approx. 35 sq km areal, 25 m depth of water
- **Pilote phase:** 77 plants/5 MW, 360 MW total Feed-in to E.ON grid
- **Vattenfall's share:** 24.5% (extendable up to 50%)
- **Further development costs:** EUR 3.1 million
- **Realisation :** 2010/2011