# **Vattenfall Capital Markets Day 2005**

Presentation by

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27 September, 2005

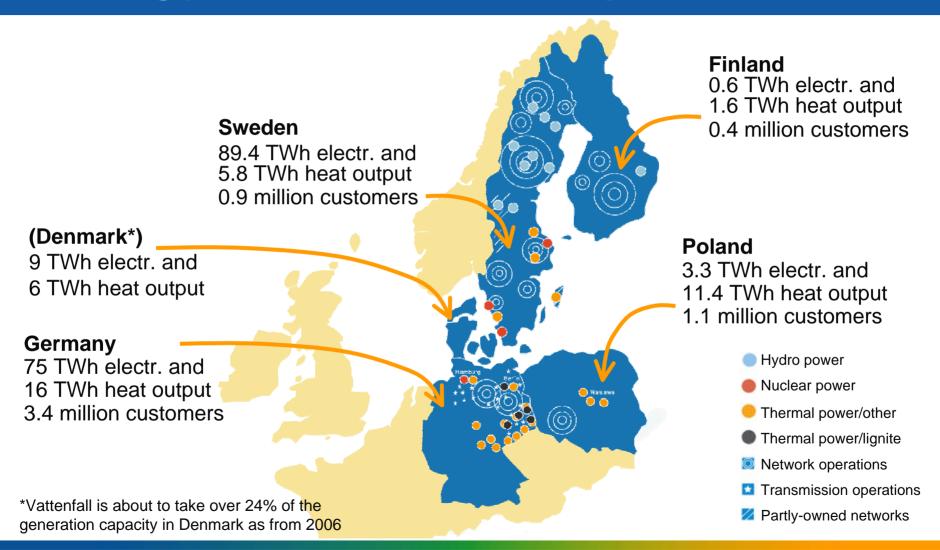


### Content

- 1. Overview & recent developments
- 2. Industry trends
- 3. Electricity prices
- 4. Strategic focus
- 5. Climate change
- Appendices



# Strong position in Northern Europe

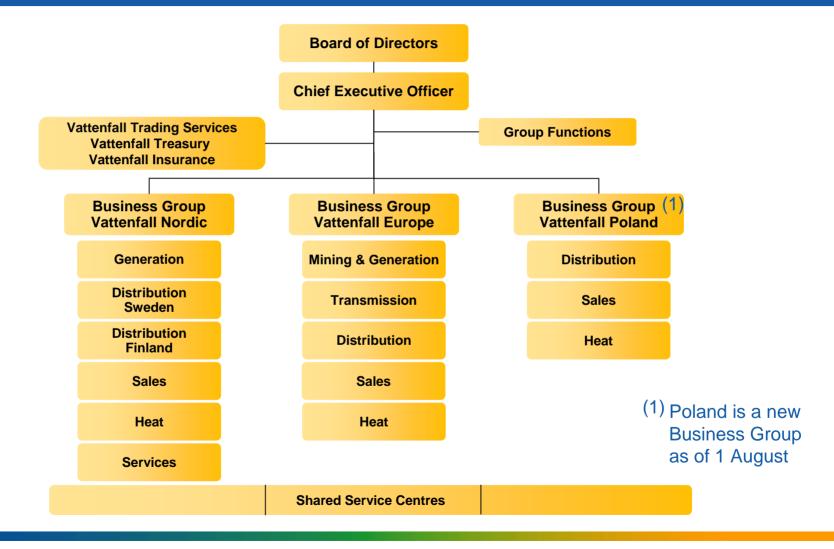




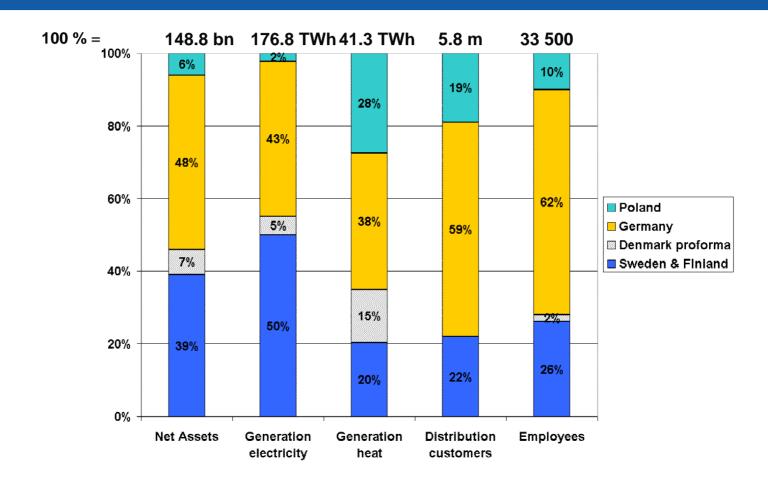
### **ONE Vattenfall**



### **Group organisation chart as of 1 August, 2005**



### Relative share of different countries



Relative share of net assets, electricity and heat generation, distribution customers and employees in the Nordic countries, Germany and Poland as of end of 2004 (net assets from Q2 2005)



### **Major investment in Denmark**

- Pursuant to the agreement with Dong dated 1 June 2005, Vattenfall will take over power and heat generation assets (2,500 MW electr. and 2,100 MW heat) in exchange for our 35.3 % stake in Elsam A/S.
- These assets represent some 21 % of total Danish electricity generation and 25% of Danish overall heat production from CHP
- Total cost of the transactions SEK 10.2 billion for the shares plus assumed debt of around SEK 3 billion – corresponds to approx. EUR 1.4 billion



### **Network regulation**

#### • Sweden:

- The new, ex-post, network performance assessment model (NPAM) is now being implemented and tested for the tariff year 2003
- Government proposals regarding increased compensation payments to customers if interruptions occur

#### Germany:

- New Energy Industry Act (EnWG) was enacted in July 2005.
- New Regulator "Bundesnetzagentur"
- Ex-ante approval of all grid fees
- Initial "cost-plus" model to be replaced by an incentive based regulation

#### • Poland:

 The regulatory framework is being improved. The new energy law recognises cost of capital as a legitimate cost for tariff purposes.

#### • Finland:

Stricter regulatory framework signalling pressure on prices and profitability



## **Nuclear update**

#### Sweden:

- Vattenfalls 600 MW reactor Barsebäck 2 was shut down on 31 May 2005
- Vattenfall will receive compensation for the closure, however negotiations with the Swedish state are still ongoing relating to this
- No time schedule in place for phasing out Sweden's remaining 10 reactors

#### **Germany:**

- An agreement exists between the industry and the government to phase out nuclear reactors when certain output volume (TWh) has been reached, based on an average lifetime of 32 years
- Theoretical closure years of Vattenfalls remaining reactors;
   Brunsbüttel 2008, Krümmel 2015, Brokdorf 2018.
   Ownership shares are: 67%, 50% and 20% respectively



### **Squeeze-Out procedure in Germany initiated**

- On 4 August, Vattenfall AB announced that it had exceeded the 95 % holding and votes threshold in its listed German subsidiary Vattenfall Europe AG.
- Vattenfall AB also announced that it had requested the Management Board of Vattenfall Europe AG to prepare a so-called Squeeze-Out of the remaining minority shareholders.
- A decision on the Squeeze-Out is expected to be taken during an extraordinary General Meeting to be held in spring 2006.
- A valuation of Vattenfall Europe AG is currently being carried out in order to asses the cash compensation payable to the minority shareholders



## **Environmental developments**

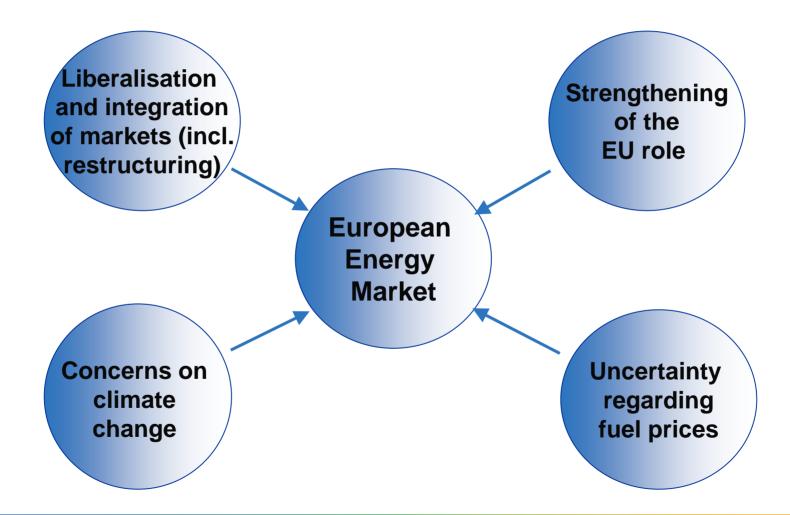
- Change to Vattenfalls Articles of Association
  - An addendum was made in April 2005 to the Articles of Association stating that "the Company shall, within the framework of businesslike operations, be the leading company in the transition to an ecologically and economically sustainable Swedish energy supply"
- Increased public focus and media attention on climate change issues
- Start of CO2 emission trading system in the EU



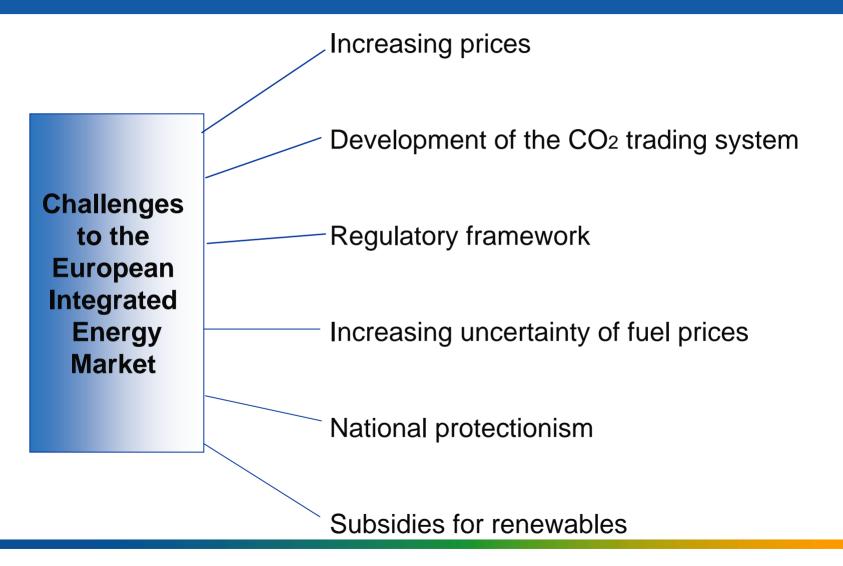
# 2. Industry Trends



### Trends affecting the European Energy Industry



### Challenges to the European Integrated Energy Market 14





# Vattenfalls opinion regarding the future of the European energy market

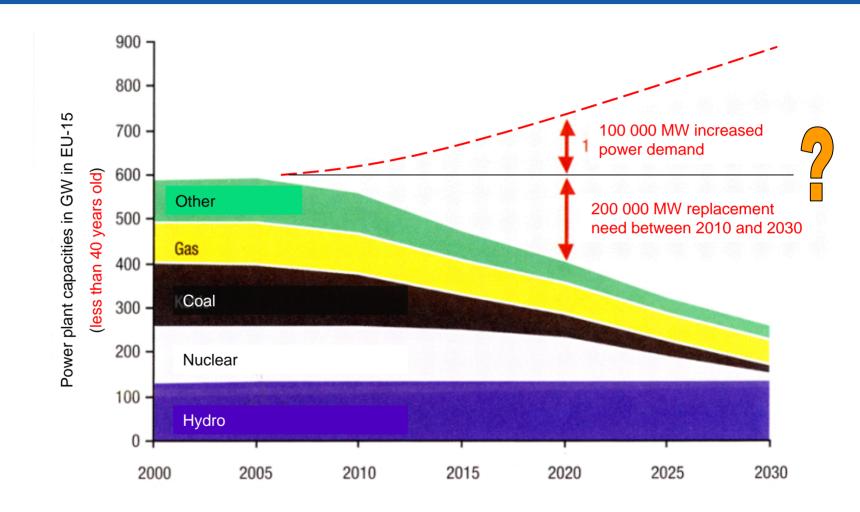
- Liberalisation and integration will continue. However, the process will take several years
- Maintaining flexibility to adapt to various development scenarios is of key importance for Vattenfall
- The liberalised and integrated market is beneficial for Vattenfall and we should therefore promote it when and where possible



# 3. Electricity prices

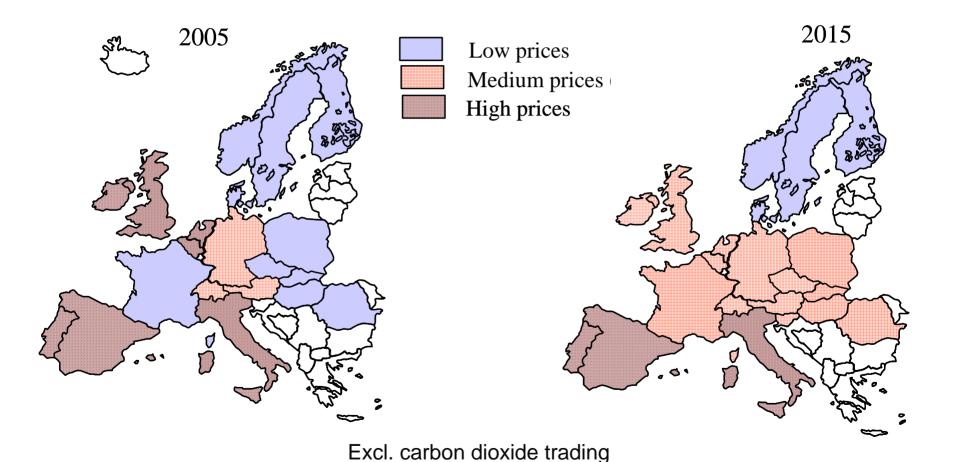


## **Need for new capacity in Europe**



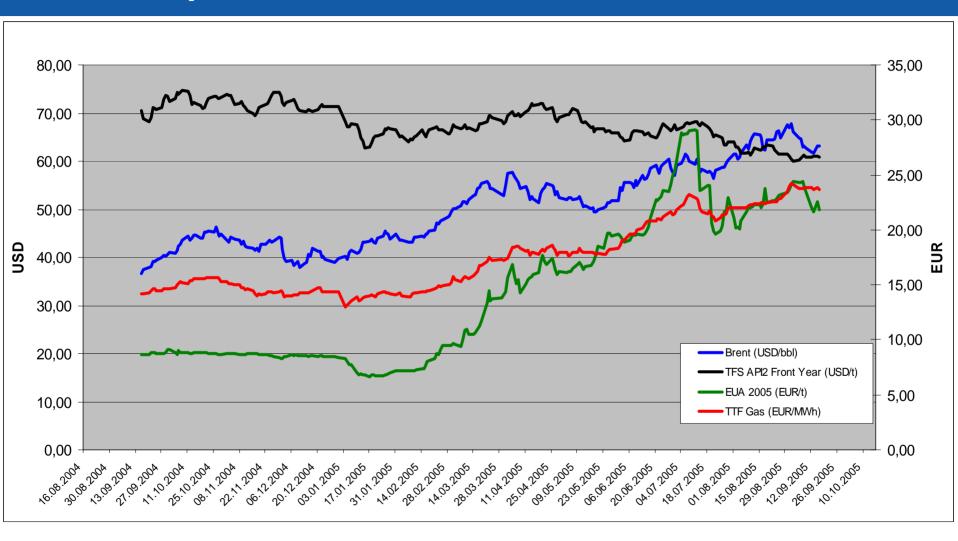


# Electricity price areas in Western Europe 2005 and 2015



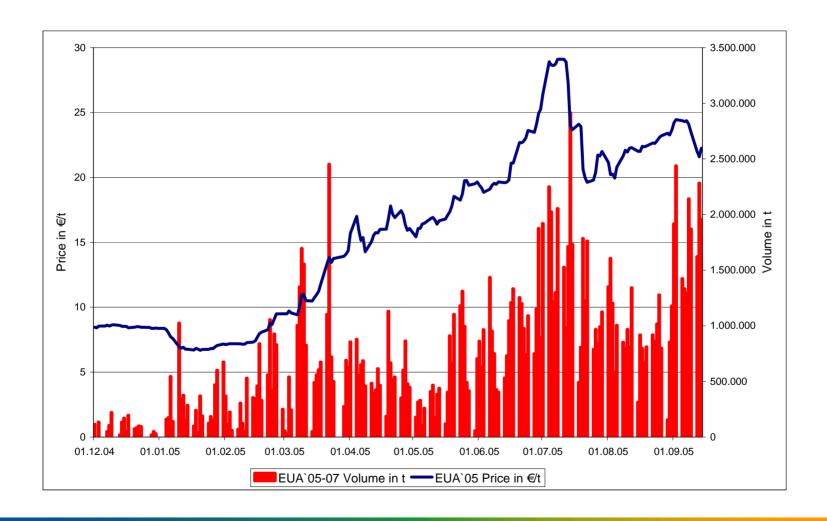


### **Development - Fuel and CO2 allowances**



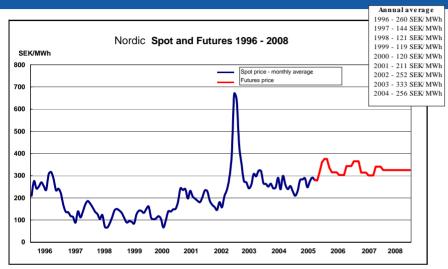


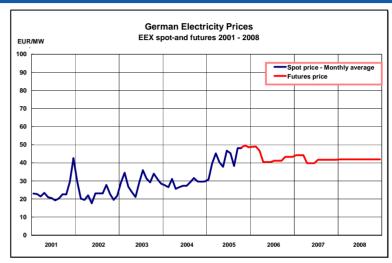
### **CO2 Price and Volume Development**





## **Power Price Development**





Source: Nord Pool Updated 22 Sept 2005

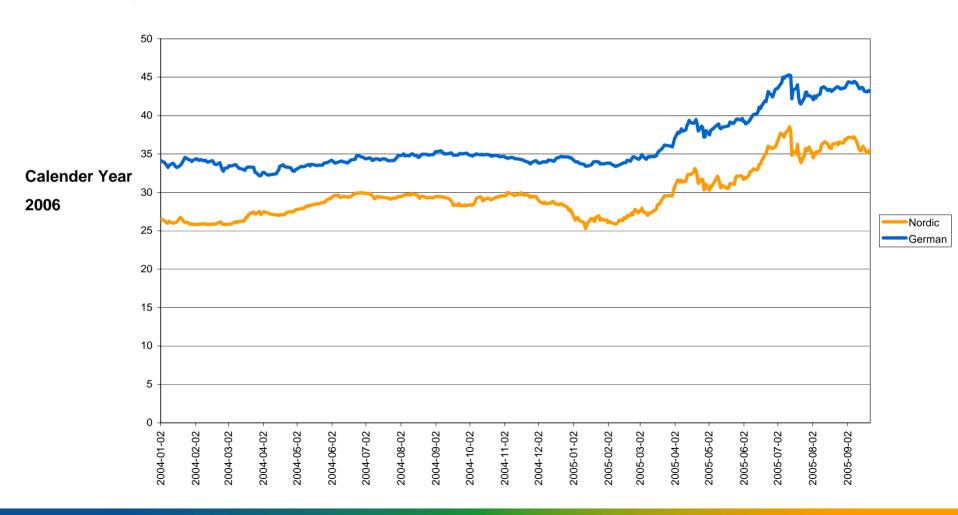


Source: EEX, 22 Sept. 2005



## **German and Nordic Future Price Development**

EUR/MWh





# 4. Strategic Focus



## Strategic focus – starting points

#### **Vattenfalls mission:**

To enhance our customers' competitiveness, environment and quality of life through efficient energy solutions and world class service

#### Vattenfalls vision:

To be a leading European energy company

#### Vattenfalls core values:

Effectiveness, Openness, Accountability



### Overall strategic direction

With the consolidation programme successfully completed, Vattenfall is currently focusing on the realisation of its vision – of becoming a leading European energy company – and remains committed to the same five ambitions, that were defined last year

- Continue profitable growth
- Be the benchmark for the industry
- Be number one for the customer
- Be number one for the environment
- Be the employer of choice



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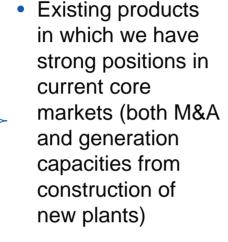


# Future product focus and main drivers of expansion



Heat

Gas



 Attractive product on its own merits with strategic potential for Vattenfall as a fuel for generation of both electricity and heat

#### Main driver

Generation

Volume

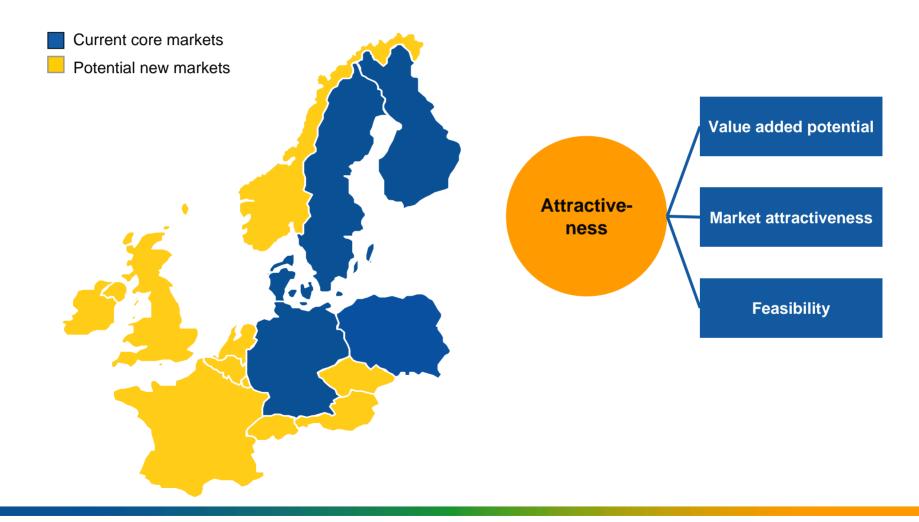
#### Logic

- Primary source for value creation
- Capital intensive
- Strong market position today
- Competitive edge in wholesale market

 Critical to build volume in order to be able to source gas at competitive prices



# A number of potential growth alternatives analysed



### **Main conclusions**

Continue focused efforts in

#### Poland

 Attractive market comprising many assets of feasibility in combination with very high value-added potential

#### The Netherlands

- Relatively attractive market containing several assets with reasonable feasibility and medium value-added potential
- Opportunistic approach in
  - Other potential new markets
    - If specific targets of interest become available



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## **Benchmark for the industry**

### **Ambition**

"Vattenfall is to be regarded as a benchmark for the industry as regards all important areas and processes."

### **Strategies**

- Identify and capture IT synergies
- Implement identified procurement synergies
- Continue to work on synergy potential within generation centralised capacity management, investment management and fuel procurement
- Establish Key Performance Indicators in relevant areas for internal steering and external comparison



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### Number one for the customer

### **Ambition**

"Winning market share with sustained or increased profitability ratings through improved customer satisfaction ratings"

### **Strategies**

- Adapt price policy and service offering to local market conditions
- Measure and monitor Customer Satisfaction Index
- Increase customer base
- Improve segmentation and define target groups
- Simplify process of becoming and remaining a Vattenfall customer



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### Number one for the environment

### Change to Vattenfalls Articles of Association

 An addendum was made in April 2005 to the Articles of Association stating that "the Company shall, within the framework of businesslike operations, be the leading company in the transition to an ecologically and economically sustainable Swedish energy supply"

### **Strategies**

- Increase investments in CO2-free and reduced CO2-emitting energy sources
  - Expansion in nuclear and hydro
  - Expansion into wind power
- Increase efficiency in power and heat production as well as in distribution
- Continue development of Vattenfalls CO2-free Power Plant Projects
  - SEK 370 million investment in CO2-free coal fired power plant in Germany to be operational in 2008
- Systematically integrate environmental aspects in all business operations



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- Be the employer of choice



## **Employer of Choice**

#### **Ambition**

 To become the Employer of Choice in order to ensure required recruitment and competence base

## **Strategies**

- Ensure first class management planning and leadership
- Ensure access to competence that meets our long-term requirements
- Ensure strong employee commitment



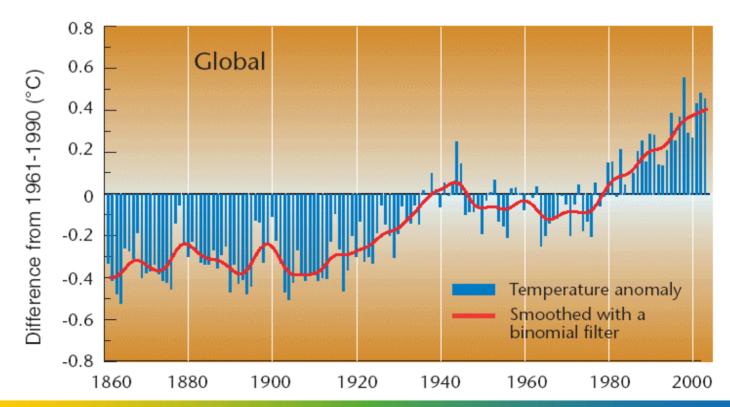
## 5. Climate change



## Global temperature is rising

Combined annual land air and sea surface temperatures from 1861-2003 relative to 1961-1990 for the globe

(Sources: Climatic Research Unit, University of East Anglia and Hadley Centre, The Met Office, UK)



#### What must be done?

- A solution to the climate change challenge will only be found step by step and will thus take time
- Investments in R&D must be focused and significantly increased in order to produce new technology that can replace or radically improve current methods of transportation and energy generation
- Economic instruments, e.g., taxes or tradable emission rights, represent the options that are most likely to lead to cost efficient abatements
- Emission rights trading is the option that in practice has provided the best opportunities for global cost efficiency and also offers the best long term incentive



## Vattenfalls strategy on climate change

- Renewable energy sources
- Increased efficiency in generation and utilization
- Cost effective mitigation e.g global emissions trading
- Options for the future: CO<sub>2</sub> capture and storage
- Act as a good citizen

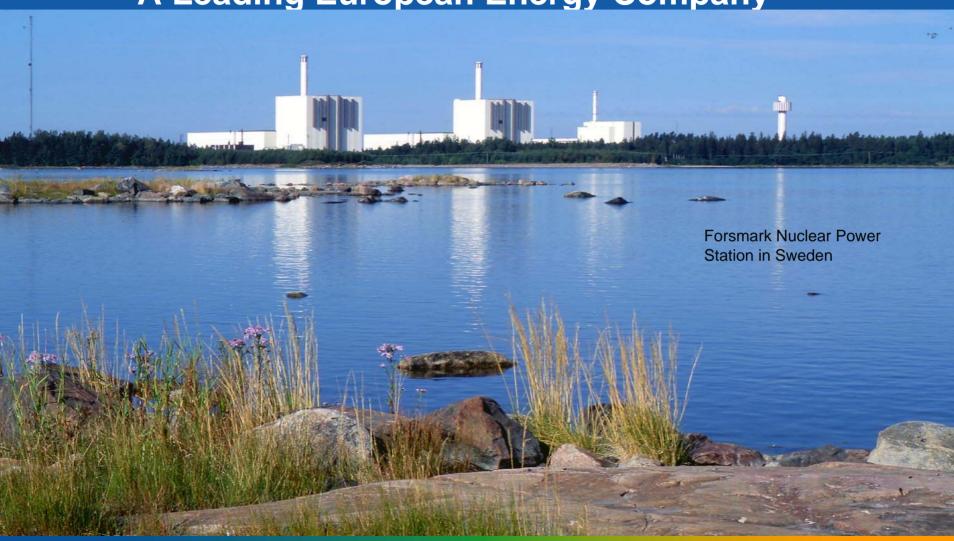


## A global price on emissions is needed

- We must do everything in our power to set the correct price on emissions and the pricing must be as global as possible. The only route is to take advantage of market forces, i.e. a global system for emissions trading must be established
- The business community, generally and globally, must play a central and very active role in setting the basic rules and regulations
- Vattenfall is demonstrating leadership in getting the European power industry to encourage politicians to institute a transatlantic/global trading regime



## Vattenfall A Leading European Energy Company



## **Appendices**



## Vattenfalls Generation Capacity, MW

#### **Installed Capacity**

(consolidated share as of 31 Dec. 2004, i.e. excl. Denmark)

	Germany	Nordic	Poland	Total
Hydro	2,894	8,386	-	11,280
Nuclear	771 <sup>(1)</sup>	7,242	-	8,013
Thermal	11,371	1,004	928	13,303
Wind	41	31		72
Biofuel&wa	iste 35	215		250
Total electr. 15,112		16,878 <sup>(2)(3)</sup>	928	32,918



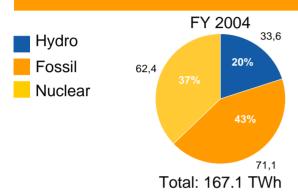
<sup>(1)</sup> Only Brunsbüttel plant is consolidated (771 MW). Vattenfalls total pro rata share is 1,409 MW

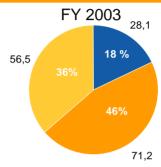
<sup>(2)</sup> Vattenfalls total pro rata share is 14,289

<sup>(3)</sup> As of 1 January 2006, approx 2,500 MW of Danish assets will be added to the installed Nordic capacity

### **Generation break down**

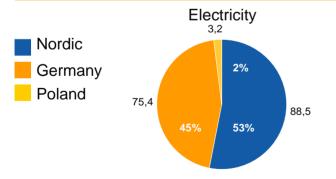
#### Electricity generation by fuel source —Higher production due to improved water levels



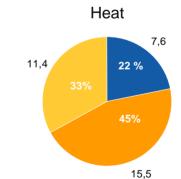


Total: 155.8 TWh

#### Electricity and heat generation by geography - 2004



Total electricity: 167.1TWh (2003 = 155.8)



Total heat: 34.5 TWh (2003 = 35.6)

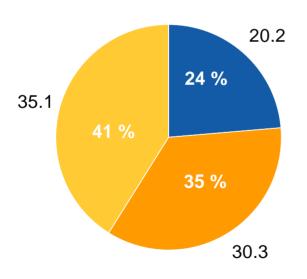
## Higher hydro production in H1 2005

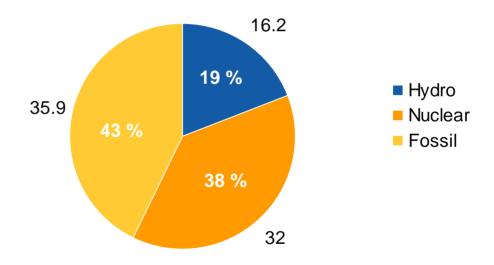
H1 2005

Total: 85.6 TWh



Total: 84.1 TWh

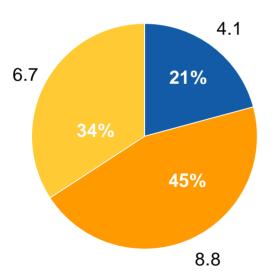




## Stable heat sales

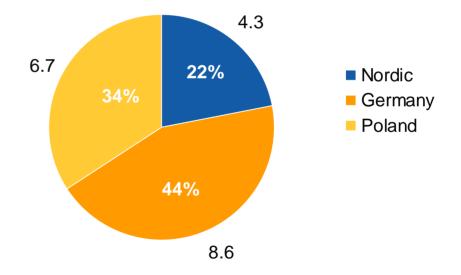
H1 2005

Total: 19.6 TWh



H1 2004

Total: 19.6 TWh

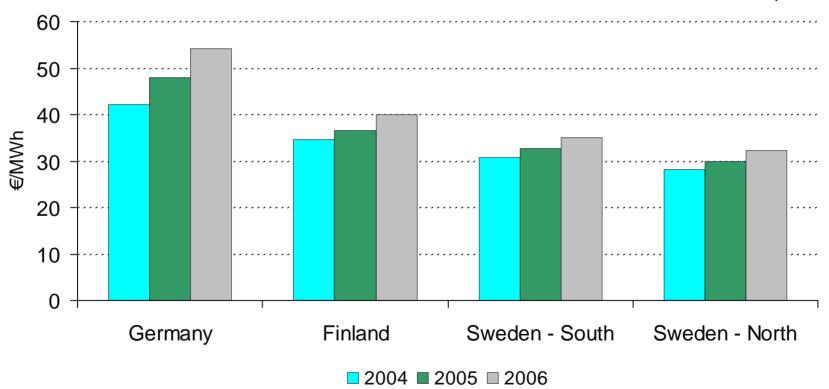


# Pulp & Paper - Prices in Germany, Finland and Sweden

### **Electricity Prices to Profile C\*Customers**

(delivered, inc energy tax, exc VAT)

\*Max load 50 MW Average load 48 MW Av. Consumption 416 GWh





## Pulp & Paper - Prices in some European countries

#### **Electricity Prices to Profile E\*Customers**

(delivered, inc energy tax, exc VAT)

\*Max load 20 MW
Average load 19 MW
.Av. consumption 166 GW

