Vattenfall Capital Markets Day 2006

Presentation by

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2. Industry trends
3. Regulation
4. Price development
5. Vattenfall's strategic focus
6. Curbing climate change
7. Conclusions

- *Back-up slides*

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1. Overview

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Strong position in Northern Europe

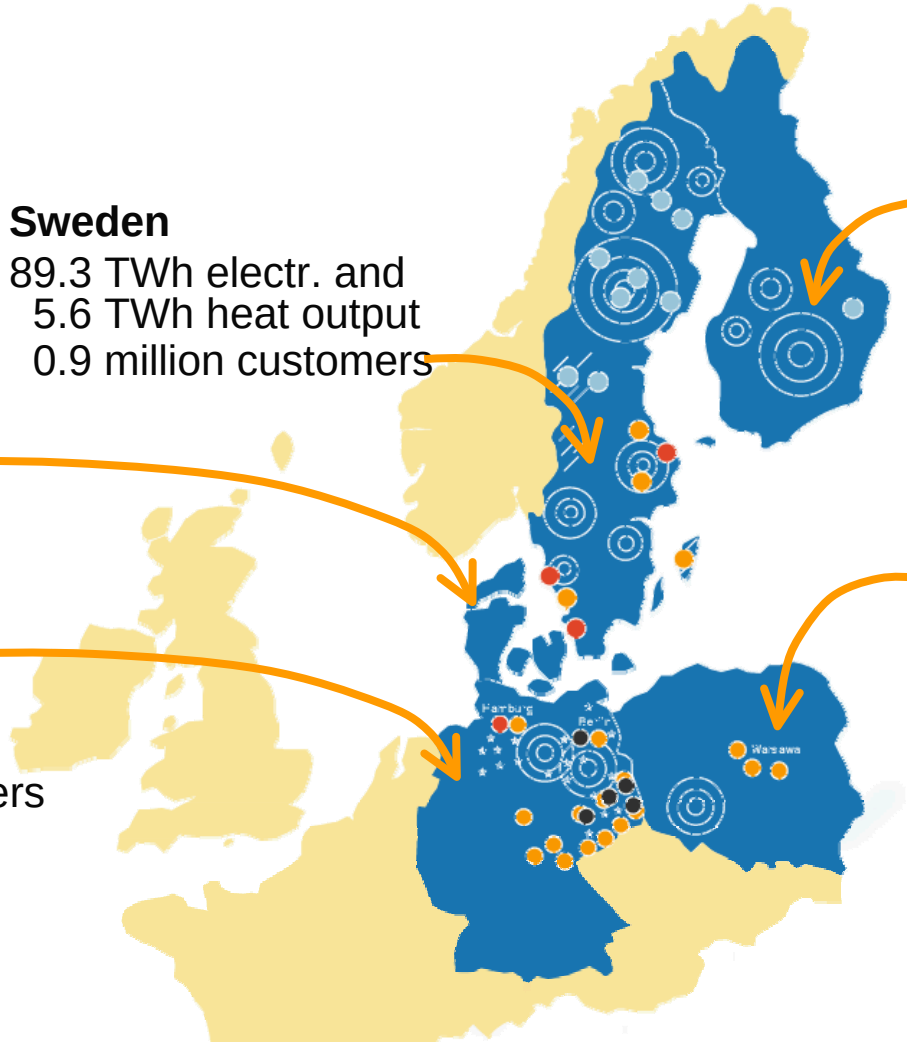
Finland
0.5 TWh electr. and
1.5 TWh heat output
0.4 million customers

Sweden
89.3 TWh electr. and
5.6 TWh heat output
0.9 million customers

Denmark
6 TWh electr. and
6 TWh heat

Poland
3.4 TWh electr. and
11.4 TWh heat output
1.1 million customers

Germany
76 TWh electr. and
15 TWh heat output
3.4 million customers



- Hydro power
- Nuclear power
- Thermal power/other
- Thermal power/lignite
- Network operations
- Transmission operations
- Partly-owned networks

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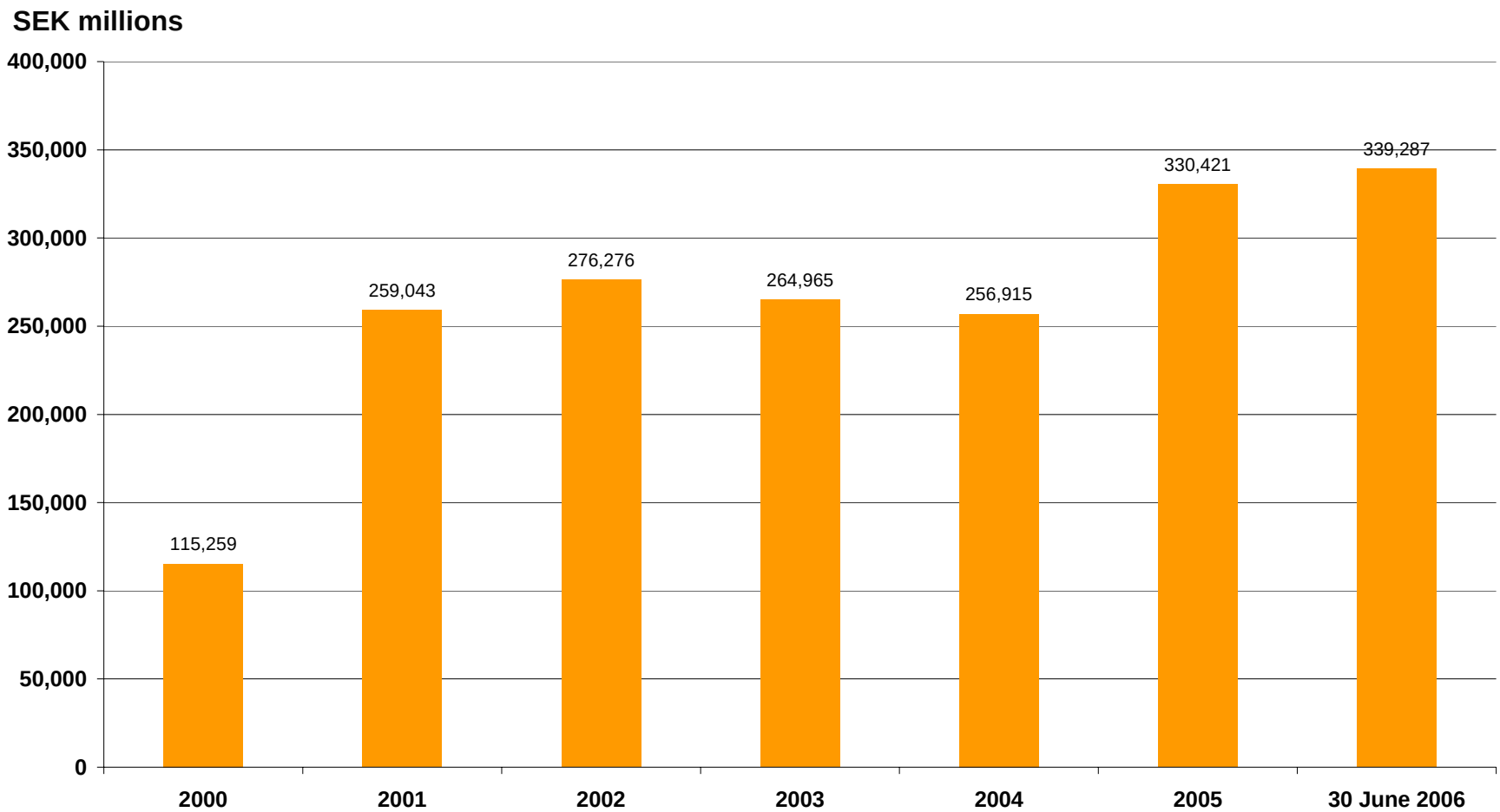
Total Assets increased from SEK 115 to 330 billion



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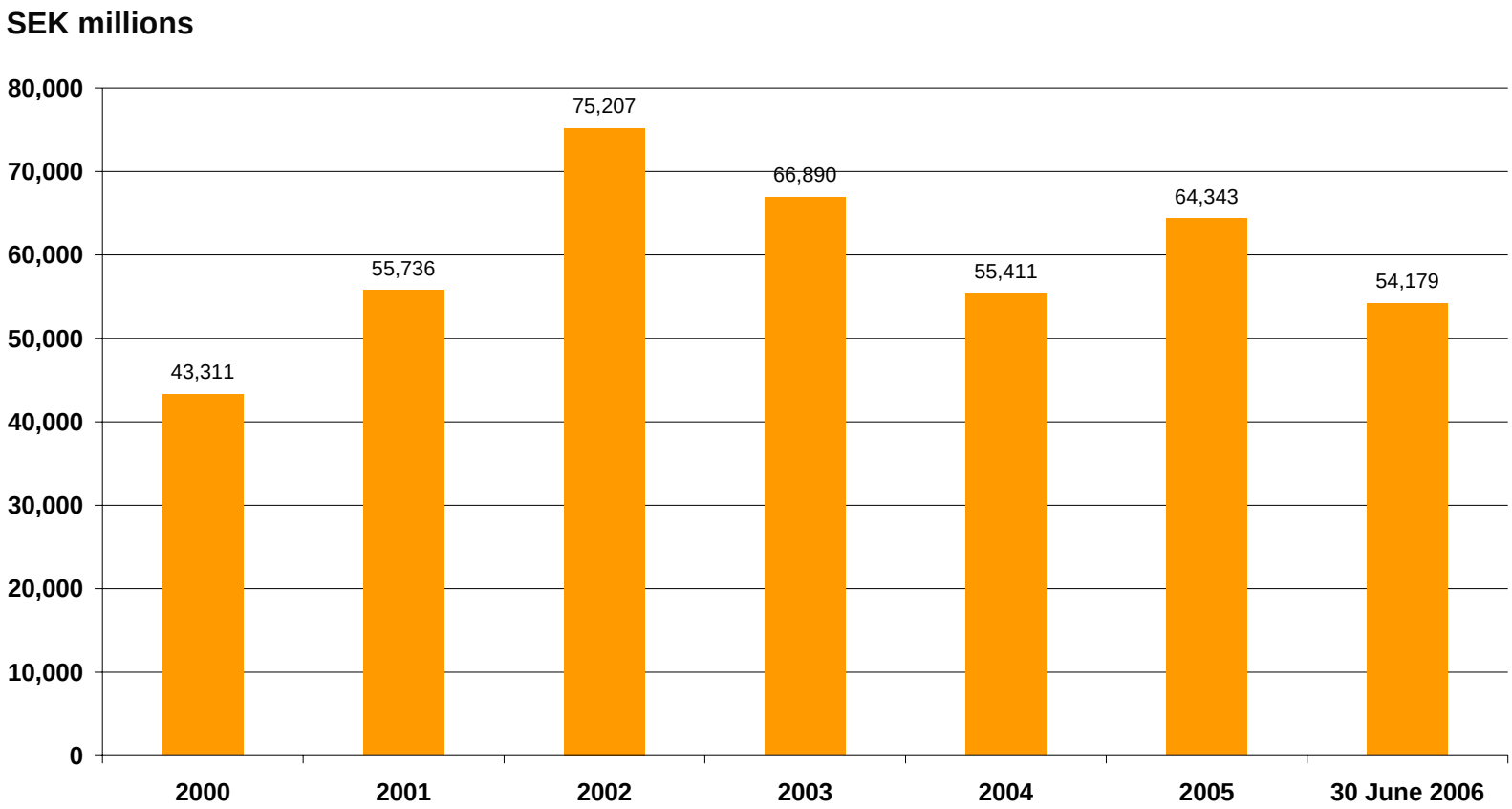
Net debt development over last six years



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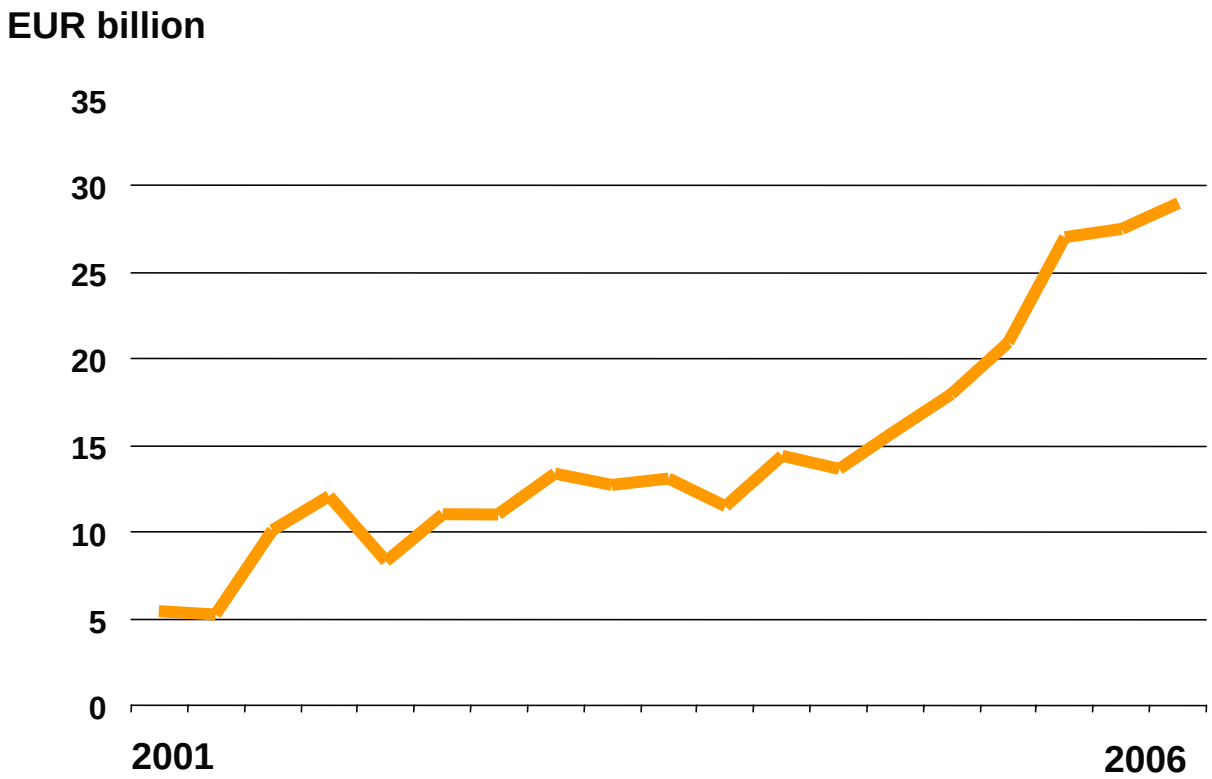
Strong increase in estimated equity value



Sources: Based on various investment bank estimates

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2. Industry trends

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Macro industry developments

- Continued liberalization and privatisation, albeit in Poland stalled privatisation
- Increased M & A activity
- Increased protectionism
- Regulatory pressure on grids
- Increased concern for security of supply, fuel supply and risk for black-outs
- Increased debate on electricity price increases

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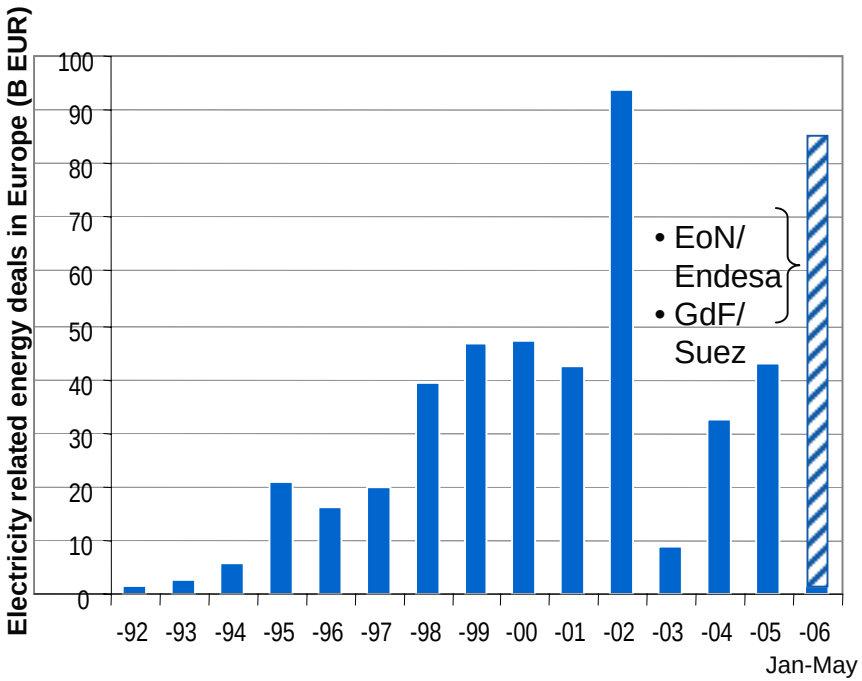
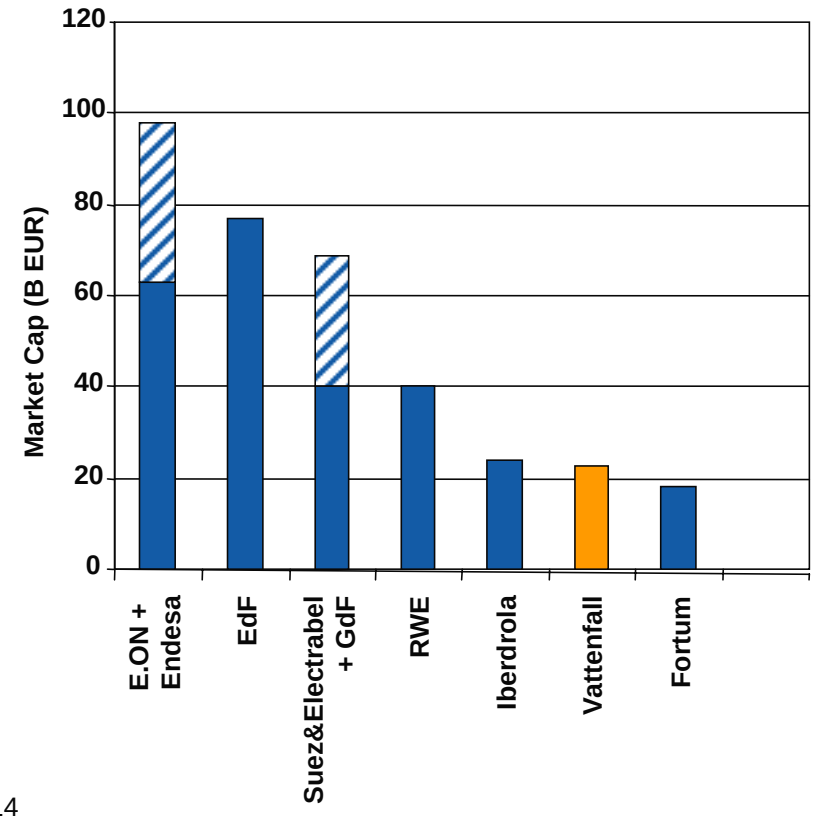
Consolidation of large players

Continued industry consolidation



Creation of Mega-players



Left graph: Announced deals larger than 200 MEUR. Source: Mergermarket
Right graph: Stock market capitalisation as at March 2006.
Vattenfall market cap calculated as an average of 2004 & 2005 Net profit * P/E 14

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Developments in value chain steps

	Mining & Generation	Trans-mission	Distribution	Sales (Supply)	Heat
Regulatory and general develop-ments:	• Increased importance of climate change • Greater uncertainties	• Tighter regulation • Increasing demands to handle new sources	• Tighter regulation • Demands on higher quality (Nordic)	• Public & political opinions on price levels	• Discussed CHP support schemes could increase profitability
Commercial develop-ments:	• Higher input and product prices • Improved financial performance	• Squeezed between price and cost pressures	• Squeezed between price and cost pressures • Increasing re-investment levels	• Further squeeze on margins • Remarkable differences between profitability in UK vs. Nordic/DE	• Increased profitability due to rising fuel and consequently heat prices

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3. Regulation

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Vattenfall's view on network regulation

- Vattenfall is positive to a regulation based on the performance
- A regulatory model should reflect customers and societies demand for high quality of supply and good service
- Vattenfall believes tariffs shall be fair
  - Reasonable return for required quality
  - Reasonable return – all cost incurred shall be reflected in the tariffs

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Ruling on German network regulation (1)

6 June 2006	Ruling from German regulator Bundesnetzagentur (BNetzA). - Vattenfall must cut transmission tariffs by 17.9 % for July-Dec. 2006 (EBIT and cash flow impact of 459 MSEK) - In addition,retroactive cut of tariffs for November 2005 – June 2006 (EBIT and cash flow impact of 507 MSEK) BNetzA disapproved certain costs, primarily: - costs for network losses, - costs for balancing power in conjunction with increased feed in of wind power - certain depreciation items
June 2006	Vattenfall appealed against the ruling of BNetzA at the Higher Regional Court in Düsseldorf - Application for interim relief - Formal filing of complaint (Hauptsacheverfahren)

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Ruling on German network regulation (2)

21 July 2006	The court issues an interim relief: - the court sees no substantial reason to delay the implementation of tariff cuts for the period July – December 2006 *but* - rejects BNetzA:s demand on retroactive tariff cuts Main court decision (Hauptsacheverfahren) is estimated to be issued within in 9-12 months
August 2006	Expected BNetzA ruling on the Distribution business (for tariffs until 2007)
End of 2006	Approval of transmission tariffs for the year 2007

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Network regulation in Sweden

Ex-post regulatory framework
(The Network Performance Asessment Model)

- A theoretical network model.

Based on a notional network which does not fully reflect actual location of network (i.e. capital base different from reality).

- Penalty/award for “customer benefits”.

Penalty. Extremely high quality expectation.

- Key assumptions for revenue:
  - Capital return
  - O&M

Low (assumed low L-T interest rates)
Unrealistic low expectation (50% cut)

- In Febr. 2006 the Regulator ordered Vattenfall to repay 236 MSEK in network tariffs for 2003

Vattenfall has appealed against the decision

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4. Price development

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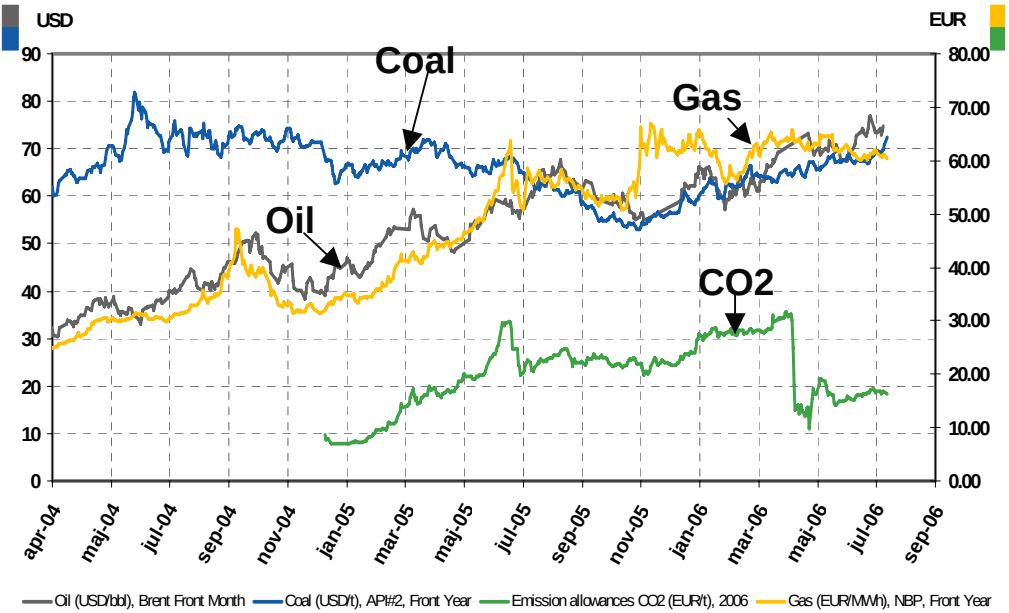
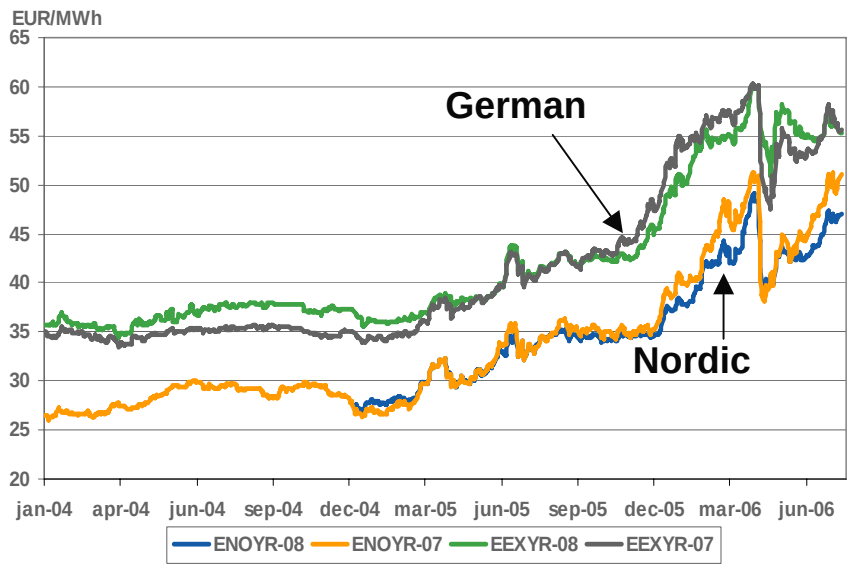
Uncertainty about future fuel prices

Increasing fuel and CO2 prices…



…have caused electricity prices to increase correspondingly



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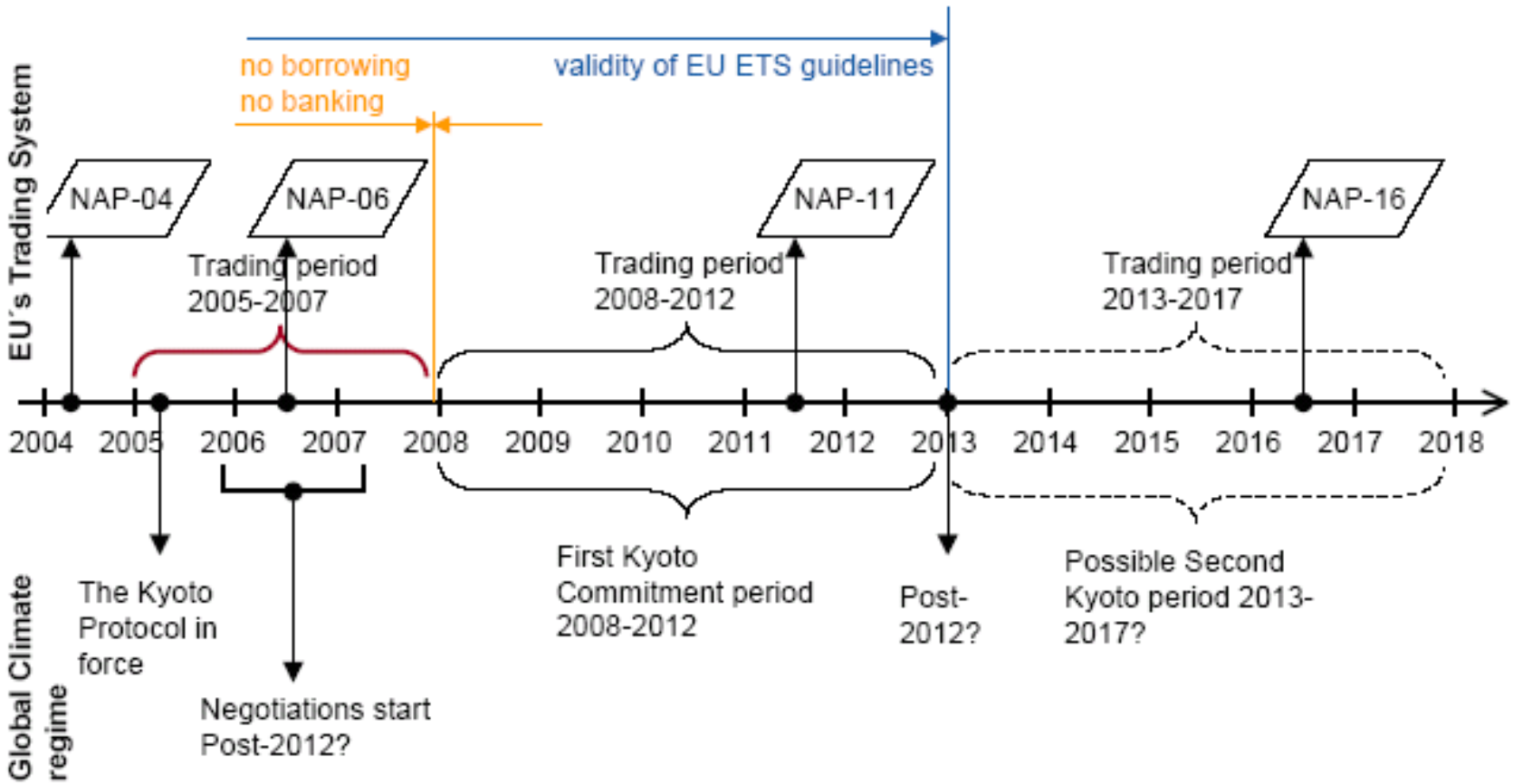
Time table (CO_2)



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5. Strategic Focus

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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 two years ago

- To continue the profitable growth
- To become the benchmark for the industry
- To become “Number One for the Customer”
- To become “Number One for the Environment”
- To be the employer of choice

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To continue the profitable growth

Ambition

To continue the profitable growth through a proactive expansion program

- Driven by generation of heat and electricity. Gas is an opportunity
- Geographic focus on core and selected target markets
- Implemented through M&A as well as plant investments

Key strategies

- Continue to identify, evaluate and pursue potential M&A candidates
- Prepare for integration and consolidation of acquired or merged entities
- Enhance efforts to evaluate attractiveness of increased investments in new or refurbished generation capacities

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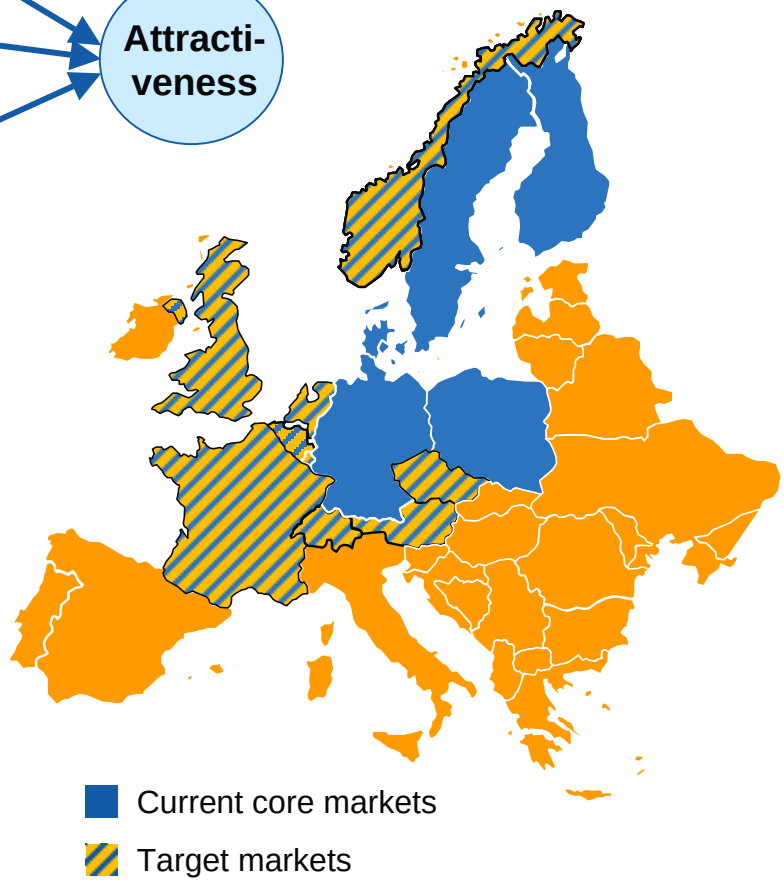
Developments in European markets

Business climate

Growth and profitability

Strategic fit and competitive advantage

Attracti-veness



Target markets
Recent focus on:

- **UK**: Market restructuring again, opportunities open up but very large targets (except some IPPs)
- **NL**: It is recognised that the companies are too small in an integrated European market, but new legislation development is pending

Non-target countries

- **Baltic** countries: Too small
- **South East Europe**: Oversupply
  Uncertain market situation and legal framework
- **Russia and Ukraine**: Uncertain market situation and legal framework
- **Iberia**: Consolidated market
  Unattractive regulatory development (Spain)
- **Italy**
  More fragmented market. Low sophistication and liquidity in the market functioning

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To be the benchmark for the industry

Ambition

Vattenfall should be the benchmark for the industry in selected areas

Key strategies

- Continue to pursue performance and cost effectiveness everywhere in the organisation
- Begin to work effectively with KPI's* in all relevant areas of the company
- Pursue cross border synergies in the IT area under the responsibility of the Group CIO team
- Allow the Group Purchasing Function to be responsible for management and purchasing synergies within the Group
- Work extensively with synergies in the area of capacity management, investment management and fuel purchasing

* KPI = Key Performance Indicator

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To become “Number One for the Customer”

Ambition

Vattenfall should become number one for the customer manifested through

- Increasing market share
- Improved customer satisfaction
- Maintained or increased profitability

Key strategies

- Guarantee competitive pricing while providing the best possible service
- Increase the customer base
- Measure and monitor the status of being ”Number one” through regular CSI measurements
- Simplify the process of be-coming a Vattenfall customer
- Evaluate opportunities to further increase coordination of customer management between different entities

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To become “Number One for the Environment”

Ambition

Vattenfall should be Number One for the environment

- Finding new and better solutions which reduces CO2-emission
- Having a leading role in developing renewable electricity and heat generation
- Acting more environmentally responsible than what could reasonably be expected from any other power company

Key strategies

- Increase investments in generation which emits little or no CO_2, including the recently defined package of renewables
- Increase capacity in existing assets which do not emit any CO_2
- Increase efficiency in existing power and heat production as well as in distribution
- Continue development of Vattenfall’s CO_2-free Power Plant Project
- Create better systems to measure and steer the environmental performance and systematically integrate environmental aspects in all business operations

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To be the Employer of Choice

Ambition

Vattenfall should be the Employer of Choice

Key strategies

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

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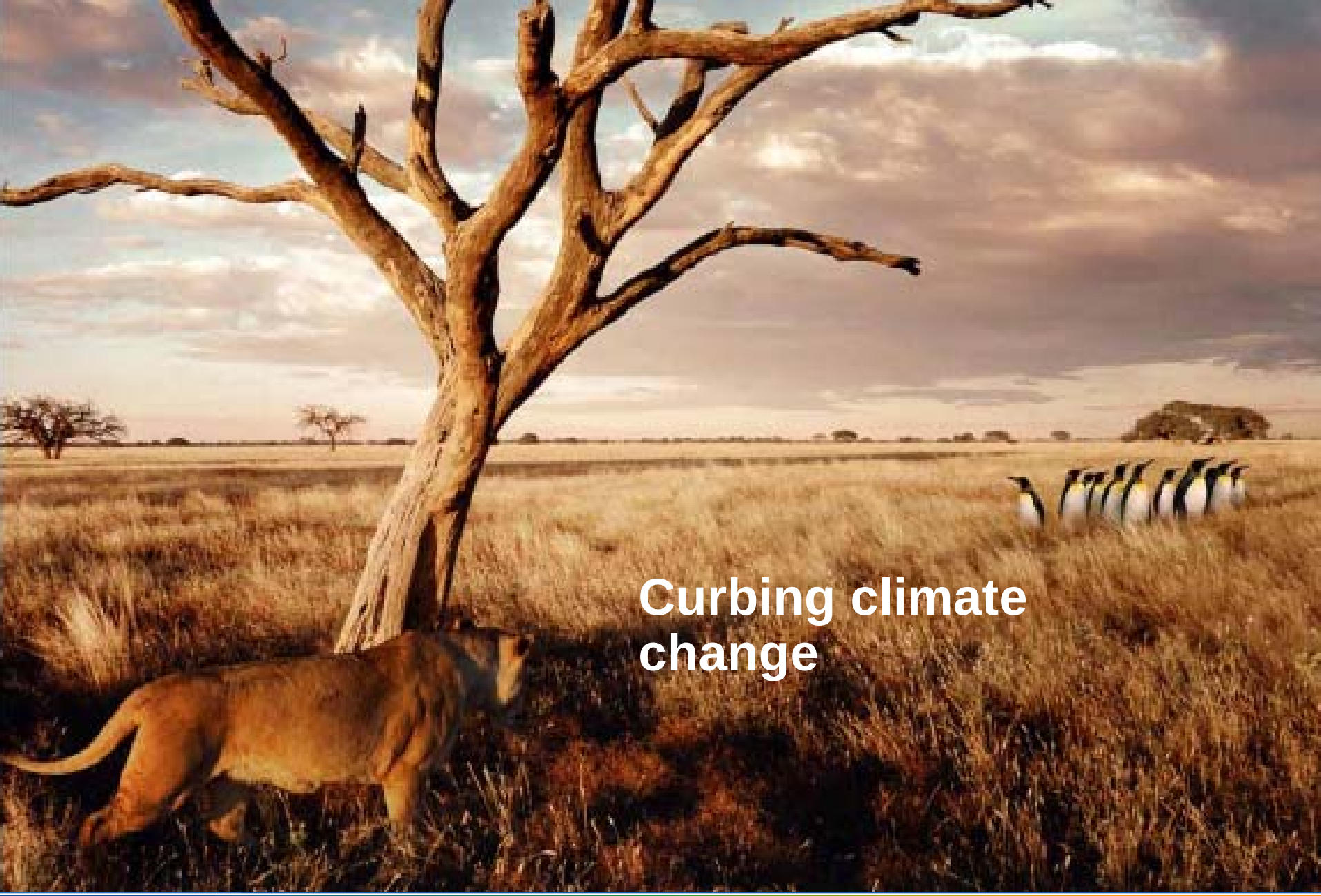

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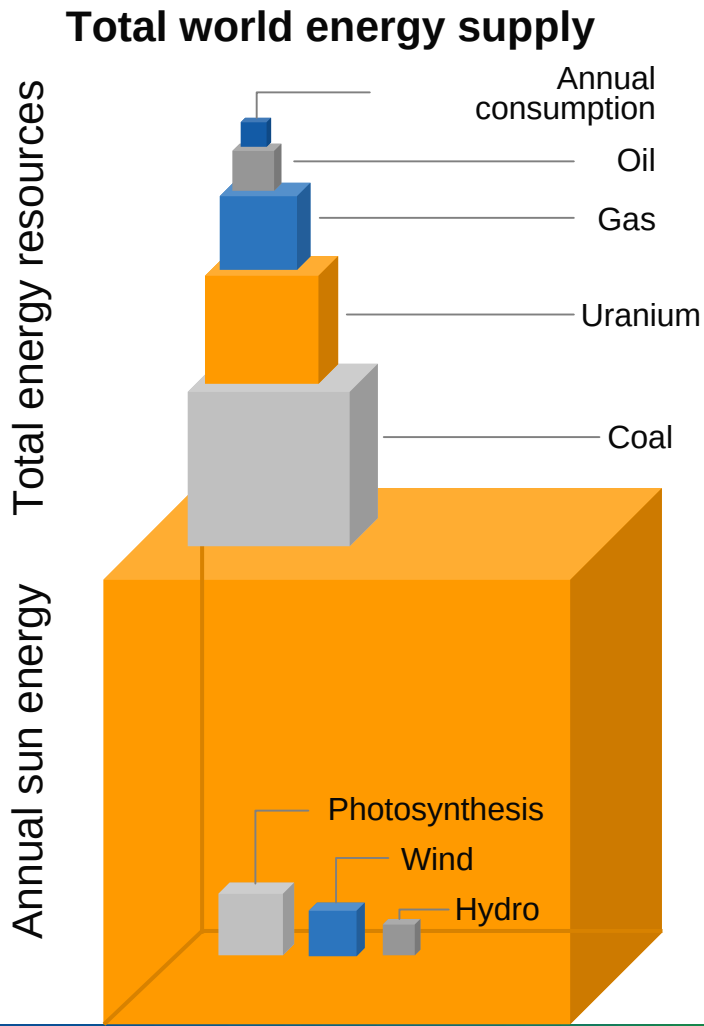
Are we running out of energy?



On today's technical and economic terms, it is possible to extract:

- At least 95 % of coal
- 40-70 % of oil
- 35 % of gas
- Less than 2 % of uranium

Source: World Energy Council, 2004

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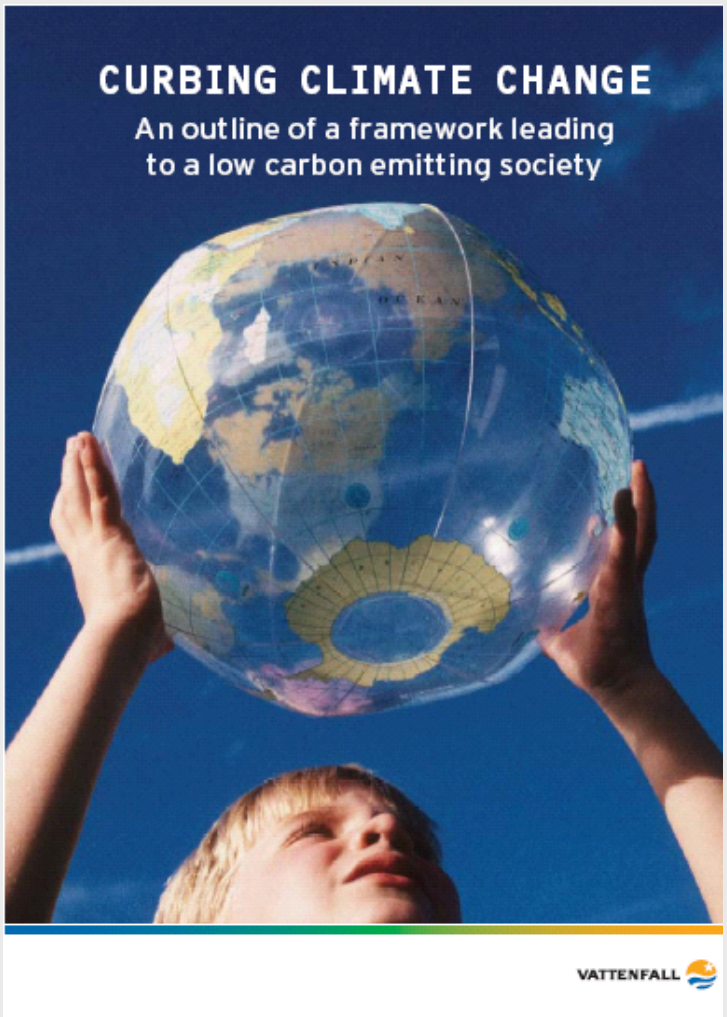
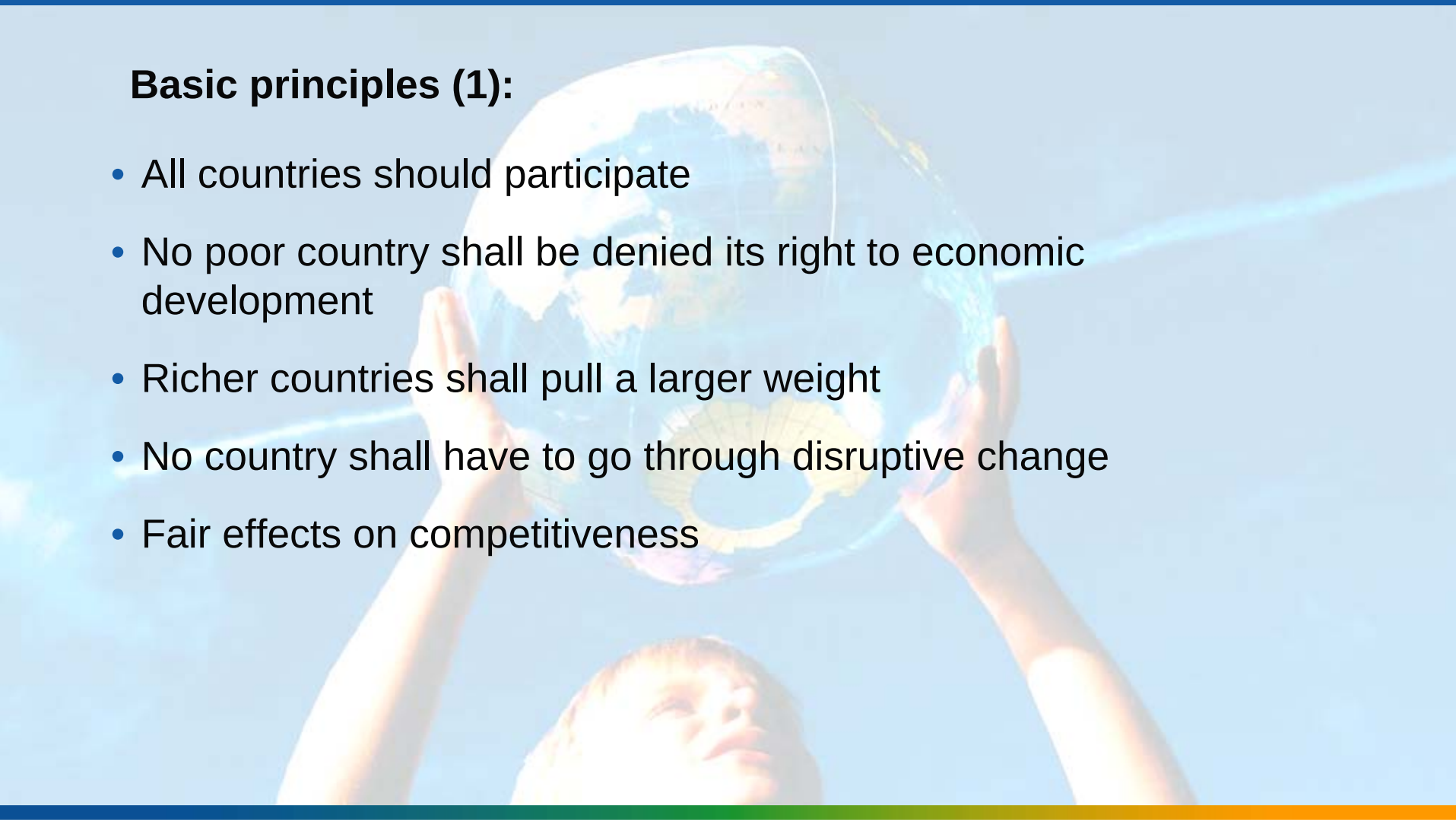
Vattenfall's proposal – curbing climate change



Vattenfall's report can be downloaded from www.vattenfall.com

Vattenfall's adaptive global burden-sharing model



Basic principles (1):

- All countries should participate
- No poor country shall be denied its right to economic development
- Richer countries shall pull a larger weight
- No country shall have to go through disruptive change
- Fair effects on competitiveness

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Vattenfall's adaptive global burden-sharing model

Basic principles (2):

- The system shall be robust. As new knowledge is accumulated parameters may change, but not the basic principles
- Emission caps should be binding
- Emission allowances are allocated to each country in relation to its share of total global GDP (PPP)
- The final allocation will be made at the national level

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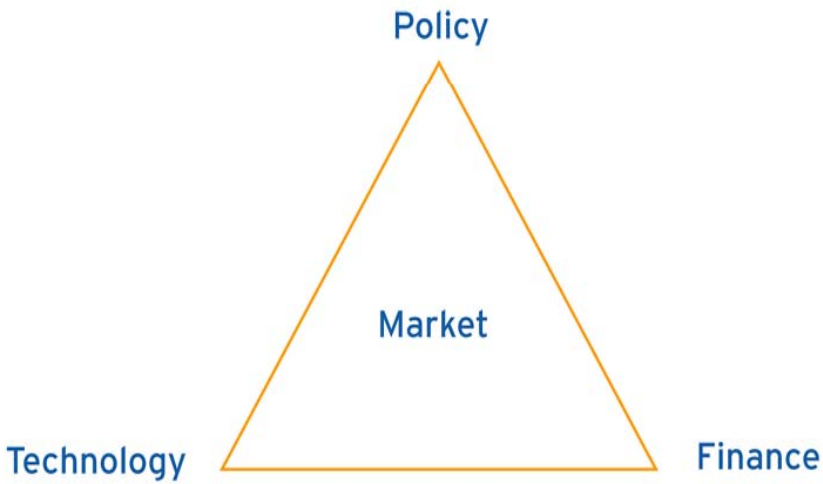
A global carbon dioxide market

Curbing climate change is about combining technology, finance and policy in a wise way. If that is done by the international community a worldwide carbon dioxide market will follow.



Why should emissions be priced at all?

- Efficiency / technology choice
- Incentives for development
- Create resources for investment
- Signal correct order of exploitation

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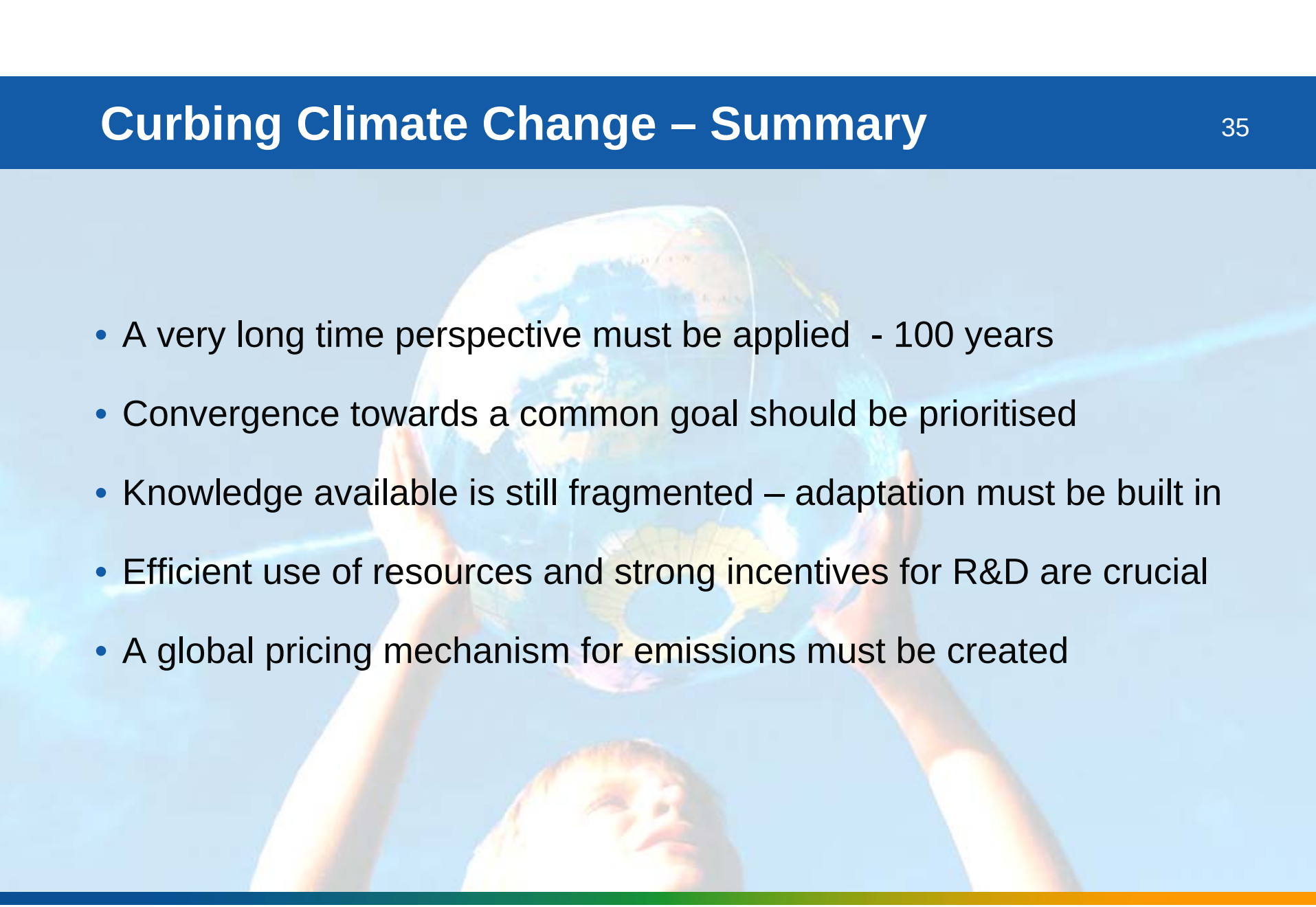
Curbing Climate Change – Summary



- A very long time perspective must be applied - 100 years
- Convergence towards a common goal should be prioritised
- Knowledge available is still fragmented – adaptation must be built in
- Efficient use of resources and strong incentives for R&D are crucial
- A global pricing mechanism for emissions must be created

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7. Conclusions

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Vattenfall - Conclusions

- Strong market position in Northern Europe
- Well diversified production mix
- Growth ambitions, both M&A and organic
- Increased cap ex programme, including renewables
- Strong financial development, but no access to equity market
- Major threats from harsher regulation and taxation
- CO2 emissions crucial for electricity price development
- Curbing Climate Change – Vattenfall takes a leading role
- Current customer perception trend must be changed

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Back-up slides

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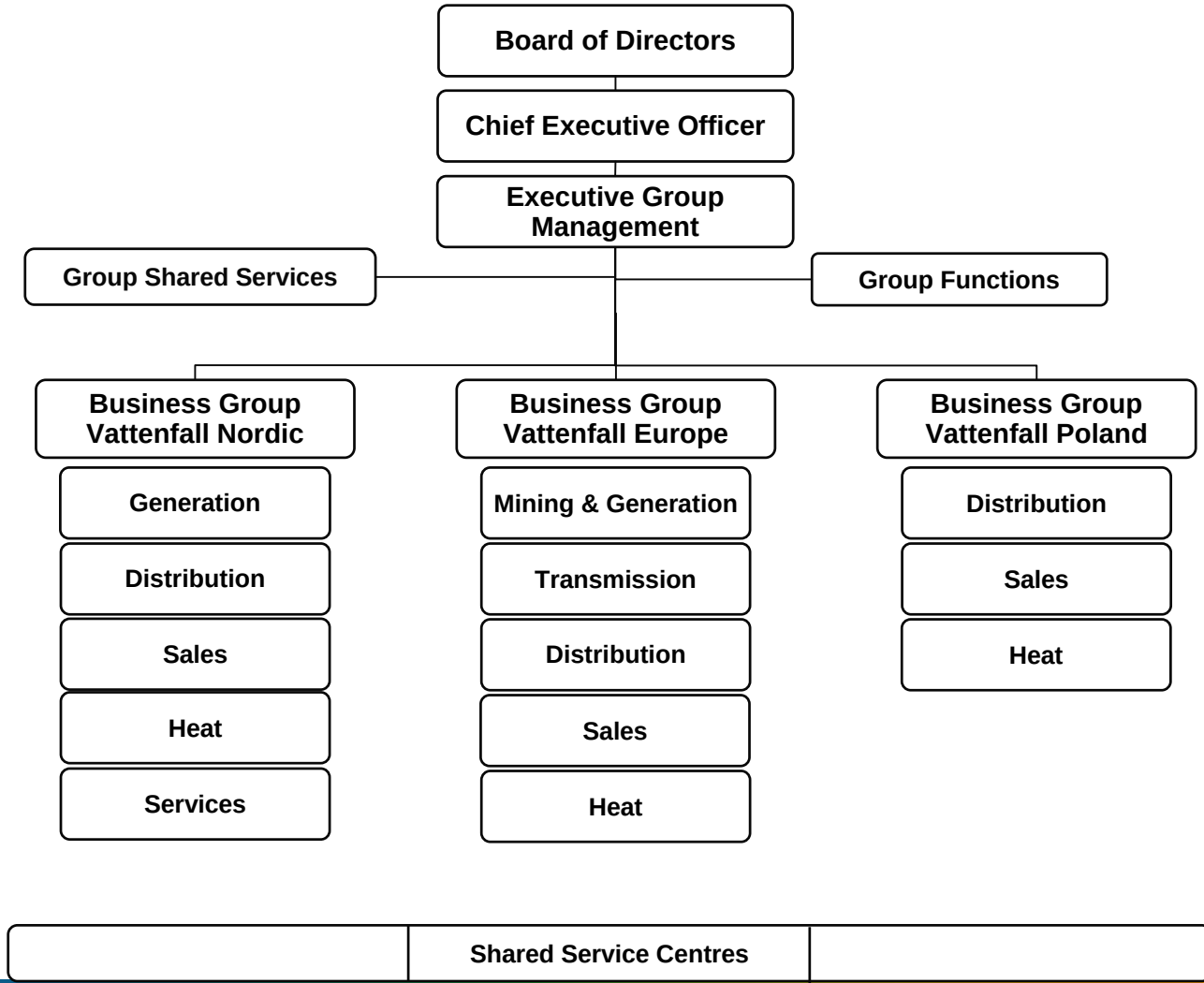
Organisation chart



Vattenfall's installed capacity (Megawatts)

IFRS consolidation

	Nordic Countries		Germany		Poland		Total	
	2005	2004	2005	2004	2005	2004	2005	2004
Electricity & heat generation capacity, MW								
Hydro power	8,399	8,386	2,894	2,894	–	–	11,293	11,280
Nuclear power	6,697	7,242	771	771	–	–	7,468	8,013
Fossil-based power	1,068	1,004	11,371	11,371	981	928	13,420	13,303
Wind power	31	31	41	41	–	–	72	72
Biofuel, waste	160	215	35	35	–	–	195	250
Total electricity	**16,355**	**16,878**	**15,112**	**15,112**	**981**	**928**	**32,448**	**32,918**
Total heat	**3,440**	**3,523**	**7,528**	**9,096**	**4,996**	**4,824**	**15,964**	**17,443**

Proportional consolidation

	Nordic Countries		Germany		Poland		Total	
	2005	2004	2005	2004	2005	2004	2005	2004
Electricity & heat generation capacity, MW								
Hydro power	8,155	7,935	2,894	2,894	–	–	11,049	10,829
Nuclear power	4,577	5,119	1,409	1,409	–	–	5,986	6,528
Fossil-based power	1,054	990	11,371	11,371	732	692	13,157	13,053
Wind power	30	30	41	41	–	–	71	71
Biofuel, waste	160	160	35	35	–	–	195	195
Total electricity	**13,976**	**14,234**	**15,750**	**15,750**	**732**	**692**	**30,458**	**30,676**
Total heat	**3,300**	**3,380**	**7,528**	**9,096**	**3,727**	**3,597**	**14,555**	**16,073**

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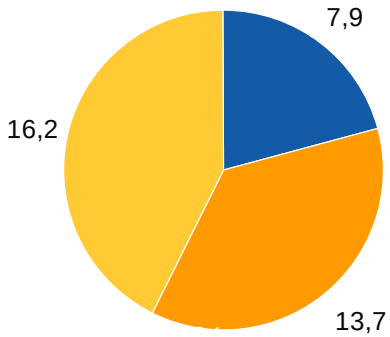
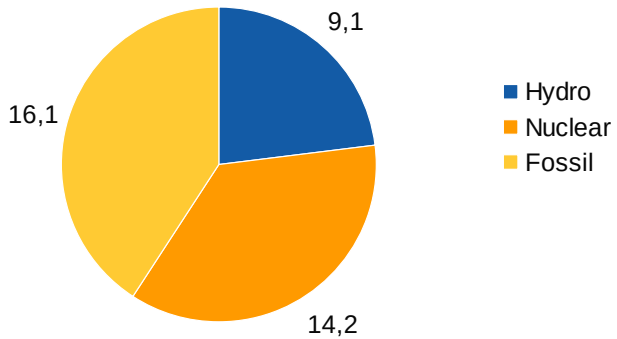
Lower hydro production in Q2 2006

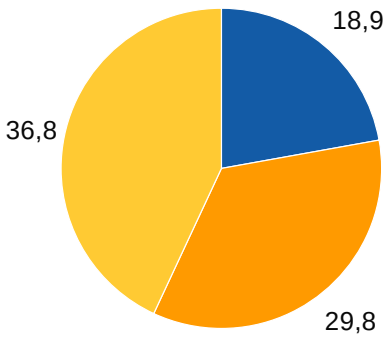
Q2 2006 Total: 37.7 TWh



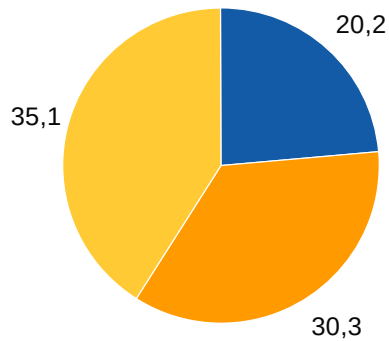
Q2 2005 Total: 39.4 TWh



H1 2006 Total: 85.5 TWh



H1 2005 Total: 85.6 TWh



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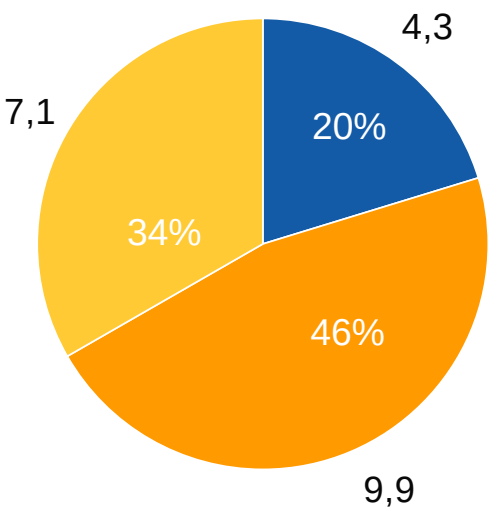
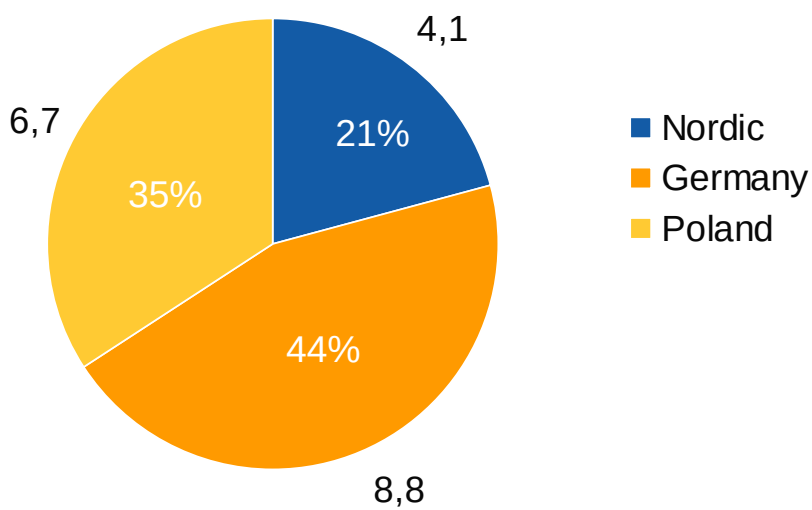
Increased heat sales in H1 2006

H1 2006
Total: 21,3 TWh



H1 2005
Total: 19.6 TWh



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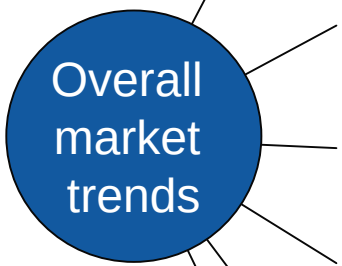
Major market trends



Trend	Comments
Liberalisation and integration of EU energy markets	• Continuous reforms towards the IEM, in particular in Eastern Europe • DG Comp Sector Inquiry more severe • Convergence of price levels between different markets • Increased correlation between price levels of fuels and electricity and between different geographical markets • Increased protectionism from national governments (-) • Increased political debate on the price developments and, in particular, in the grid area tougher regulation (-)
Consolidation of large players	• Continued high M&A activities • Creation of Mega-players • Tendency towards establishment of national champions
Convergence of electricity, gas and heat but departure from multi utility	• Integration of value chain01 • Strengthened linkage between gas and electricity prices • Increasing level of dual fuel sales in gas/electricity (plus heat)
Increased uncertainty about future fuel prices	• Potential for very high oil prices • Possibility of decoupling gas/oil • Possible gas bubble over next years • Uncertainty whether the coal price will come back down to 40 USD/ton
Increased concerns for and actions to deal with climate change	• Uncertain support for a continued CO2 emission trading system after 2012 • Increased investments in CO2 free technologies for fossil fuels • Continued interest in renewable capacities
Major resumption of construction of generation assets	• Increased number of expansion projects • Price level on equipment going up

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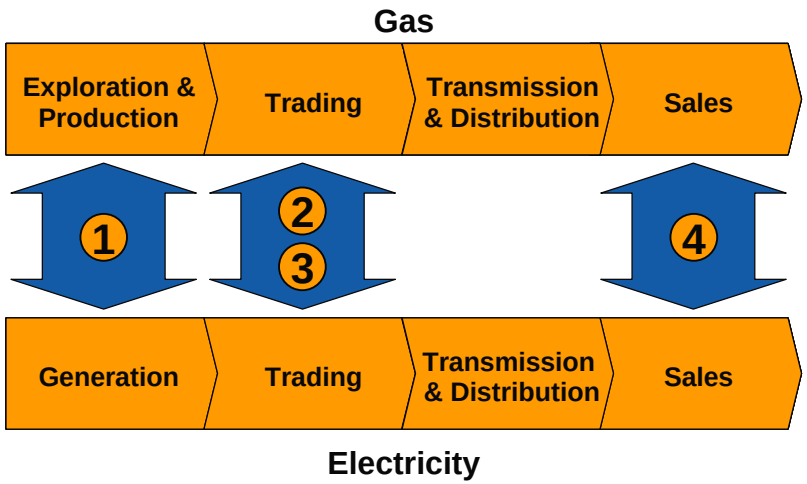
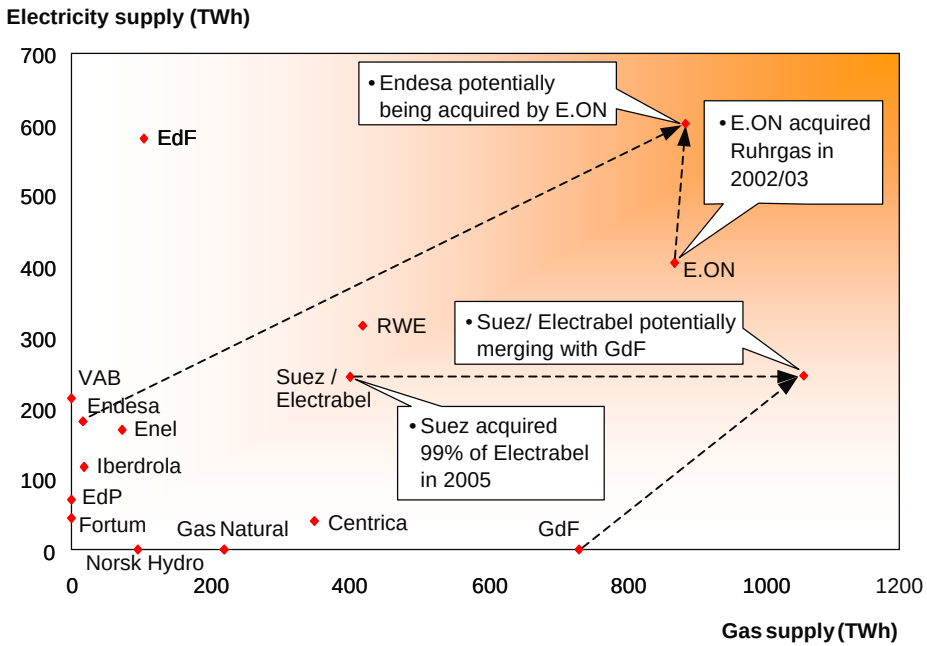
Convergence of gas and electricity

Linking value-chains



Gas – power mergers

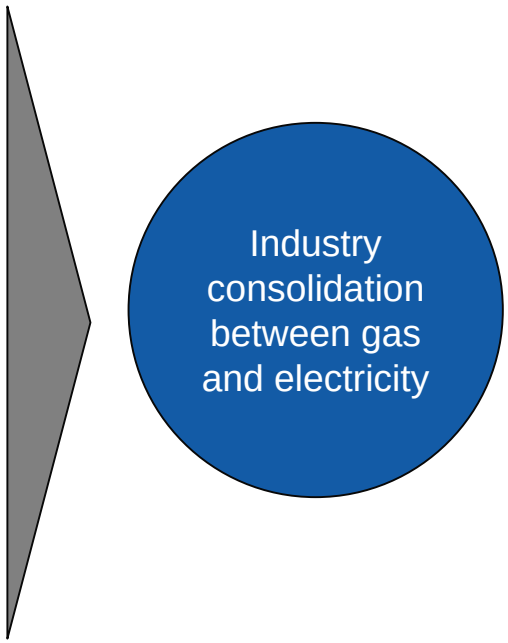


1. Gas has the largest share of power generation capacity
2. Gas directly price setting in many power markets and also has impact on power prices through CO2 prices
3. Most trading houses trade both gas and power (economies of scale, better informed, arbitrage opportunities)
4. Dual fuel offers increasing

Convergence between gas and electricity

Linkages between gas and electricity

- **Gas for power generation**
- **Price relationship**
- **Joint trading operations**
- **Retail operations**



Benefits from electricity/gas consolidation

- **Growth opportunities**
- **Cost synergies**
- **Risk diversification**
- **Trading/arbitrage opportunities**
- **Know-how**

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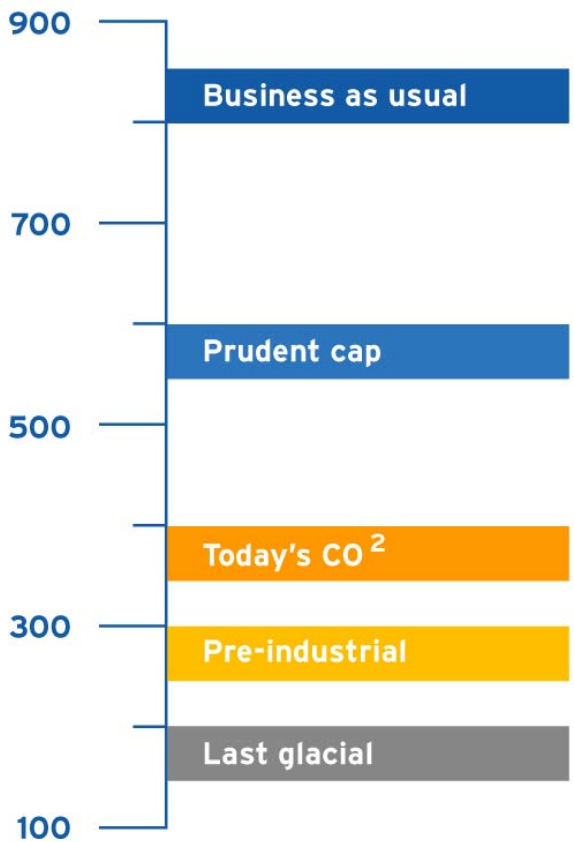
Atmospheric CO_2 content (ppm)



Source: W. Broecker

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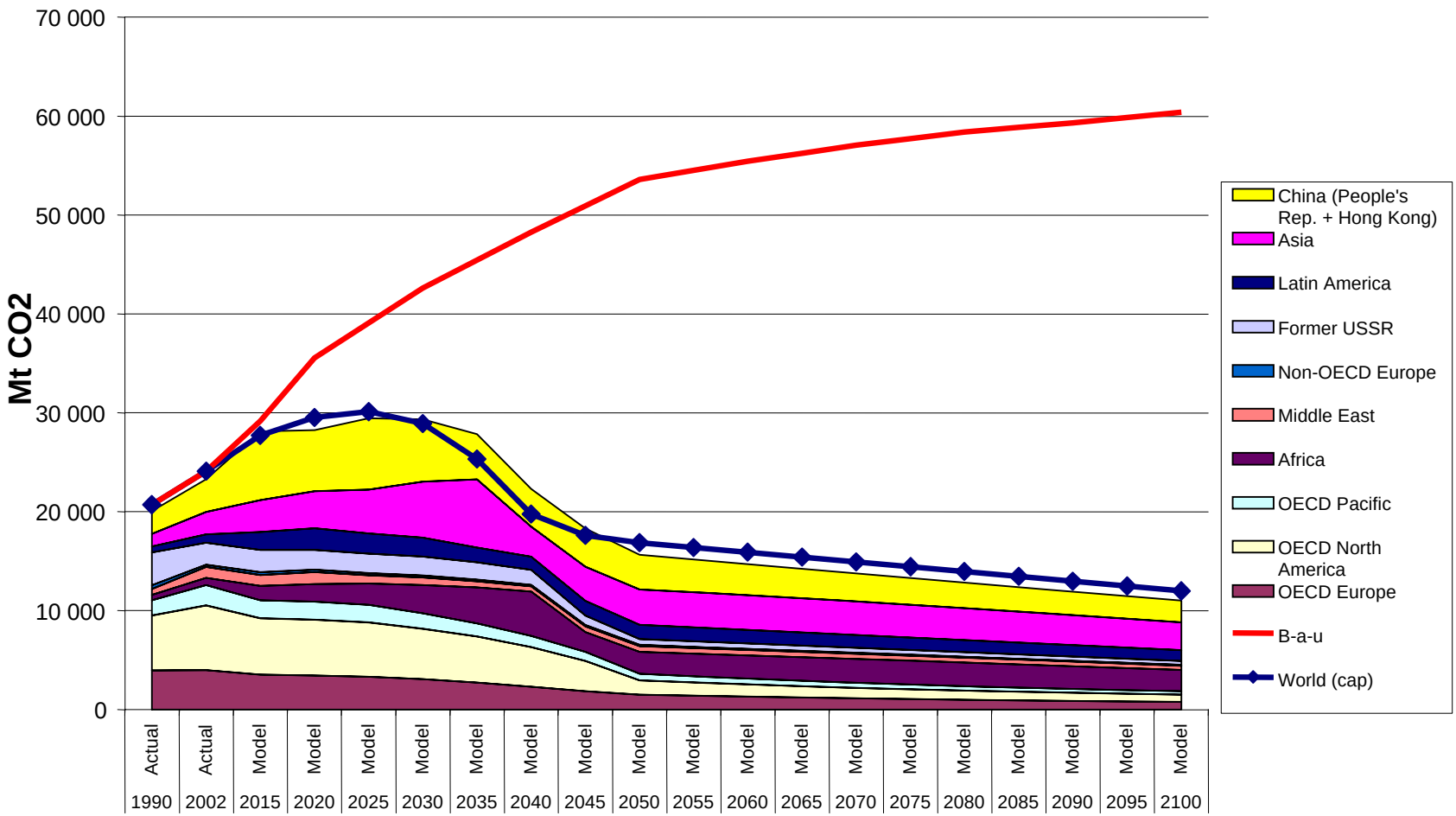
Allocation of CO2 emission allowances for emissions from fuel combustion – ”Early peak”



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Allocation of CO2 emission allowances for emissions from fuel combustion – ”Late peak”