

# FORTUM

A leading power and heat company  
in the Nordic area

Investor/Analyst material

December 2010

# Disclaimer

This presentation does not constitute an invitation to underwrite, subscribe for, or otherwise acquire or dispose of any Fortum shares.

Past performance is no guide to future performance, and persons needing advice should consult an independent financial adviser.



# Content

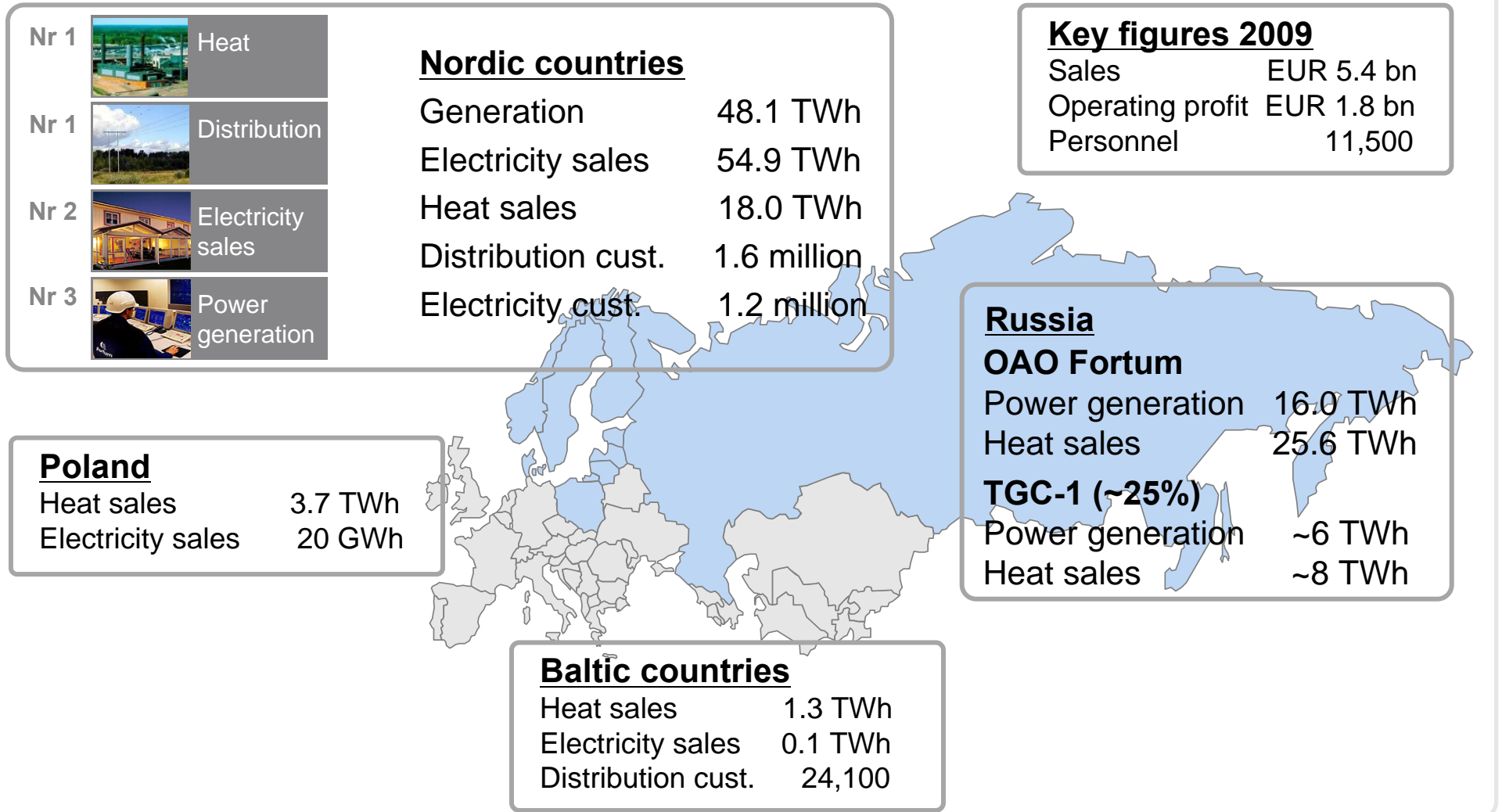
Fortum today

European power markets

Russia

Financials and outlook

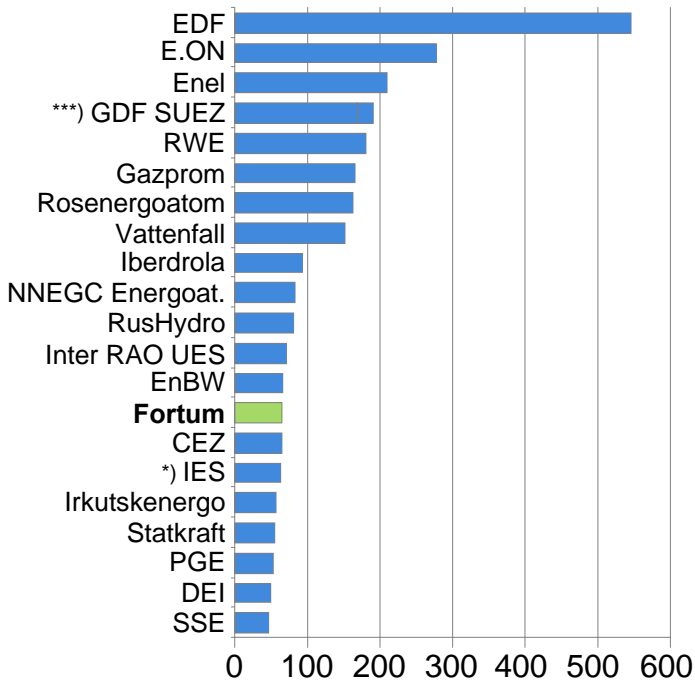
# Our geographical presence today



# Fortum mid-sized European power generation player; Global #4 in heat

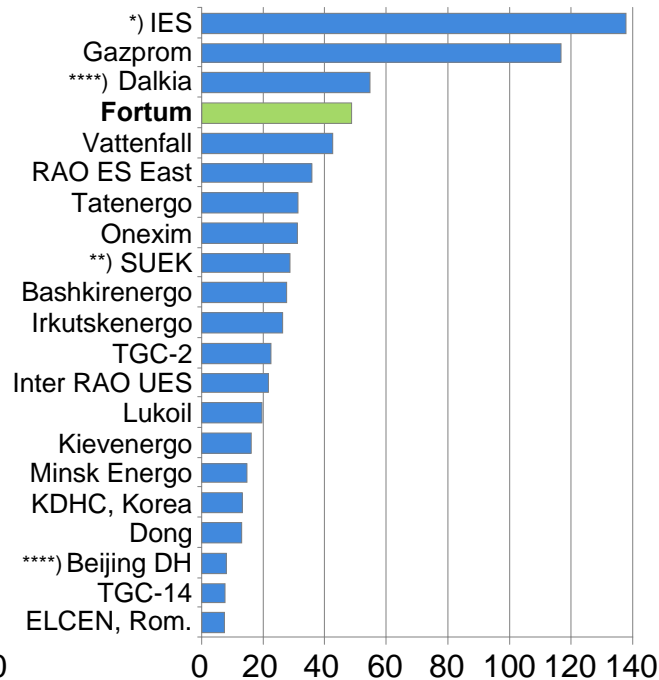
## Power generation

Largest producers in Europe and Russia, 2009  
TWh



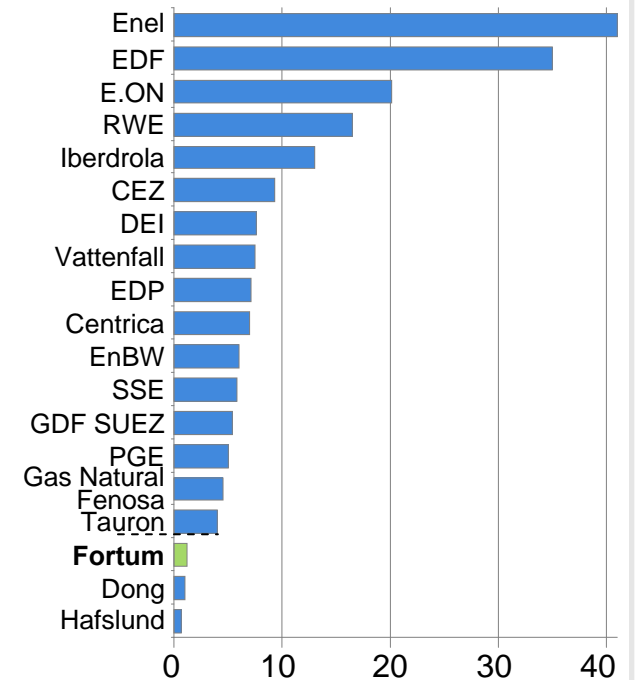
## Heat production

Largest global producers, 2009  
TWh



## Customers

Electricity customers in EU, 2009  
millions



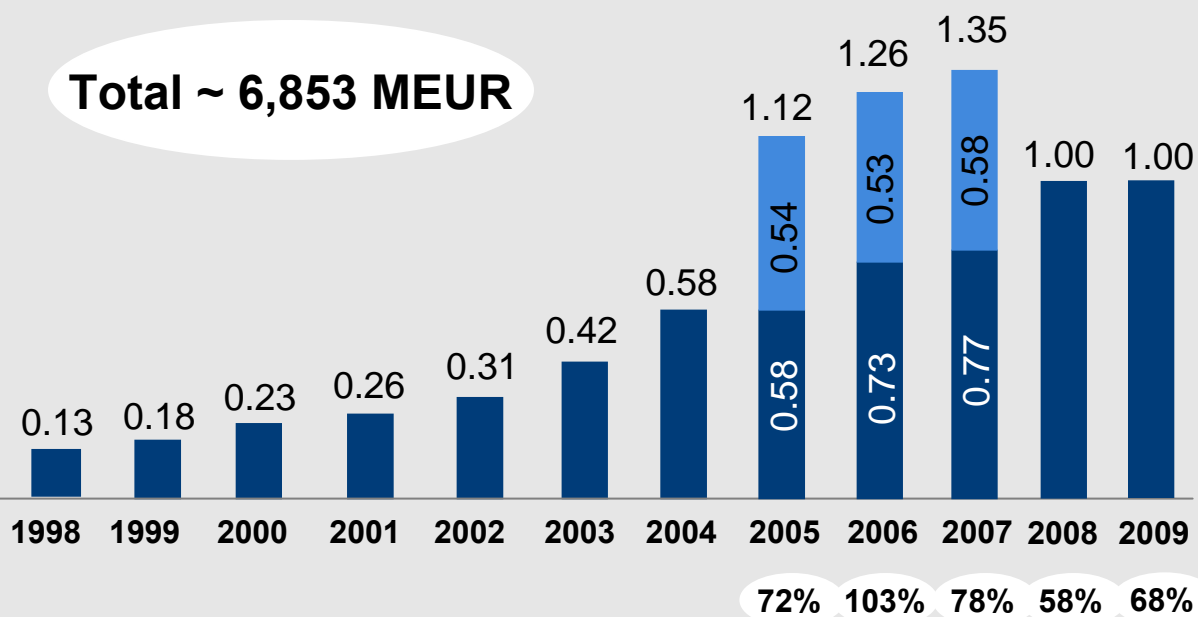
\* incl. TGC-5, TGC-6, TGC-7, TGC-9, \*\* incl. TGC-12, TGC-13. \*\*\* incl. International Power  
Source Company information, Fortum analyses, 2009 figures pro forma, \*\*\*\* 2007

# Capital returns

## Dividend per share

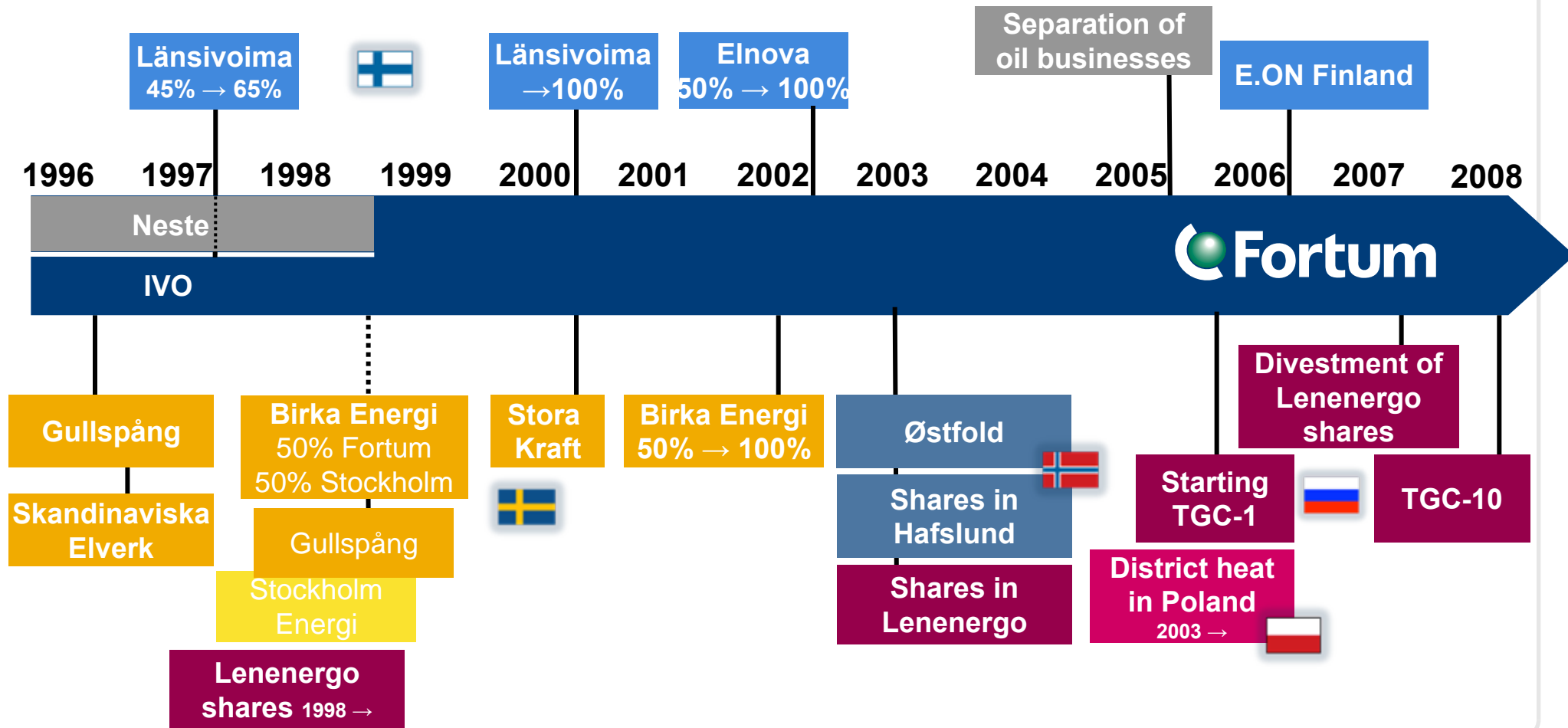
EUR

**Total ~ 6,853 MEUR**



- Dividend 2009 EUR 1.00 per share, in total ~EUR 0.9 billion
- Dividend policy of 50-60% payout of previous year's results on the average

# Fortum's strategic route



# Fortum's Mission and Strategy

## Mission

Fortum's purpose is to create energy that improves life for present and future generations. We provide sustainable solutions that fulfill the needs for low emissions, resource efficiency and energy supply security, and deliver excellent value to our shareholders.

## Strategy

Leverage the strong  
Nordic core

Create solid earnings  
growth in Russia

Build platform for  
future growth

Competence in CO<sub>2</sub>-free nuclear, hydro and energy efficient CHP production,  
and operating in competitive energy markets

# Strategy builds on our competences and industry beliefs

## Two strong platforms for growth

- Nordic power wholesale and heat market
- Russian power and heat market

## Competitiveness key for long term value creation

- Sustainable business models cannot rely on a continuous high level of subsidies

## Integrating European energy markets and a gradual decrease in the weight of the Nordic power price

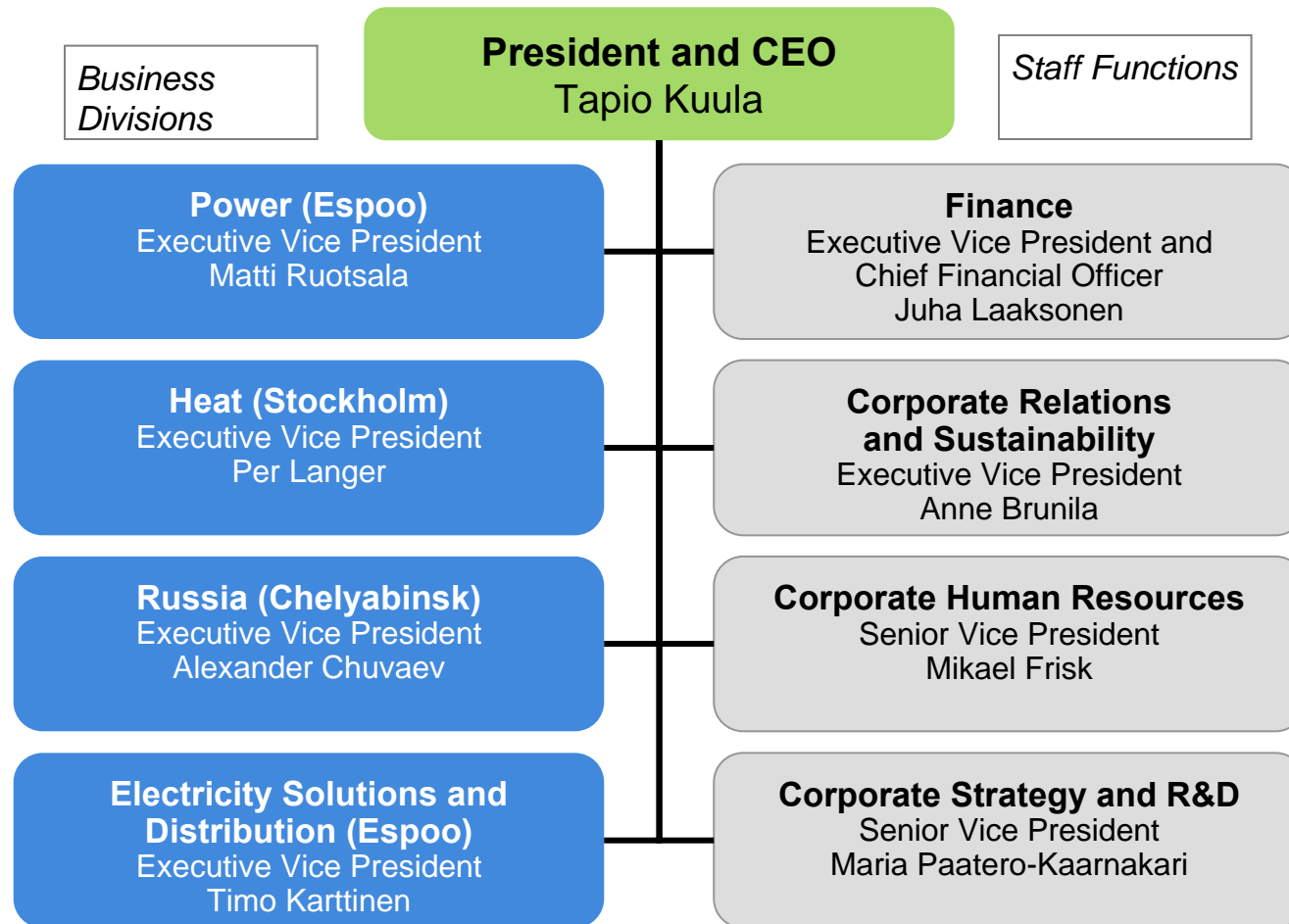
- Leverage our competences in nuclear, hydro and CHP
- Industrial restructuring opportunities

## More attractive growth prospects in power and heat generation

- Electricity solutions and distribution part of the Nordic core

**Strong focus on delivering value and stable returns to shareholders**

# Organisational structure

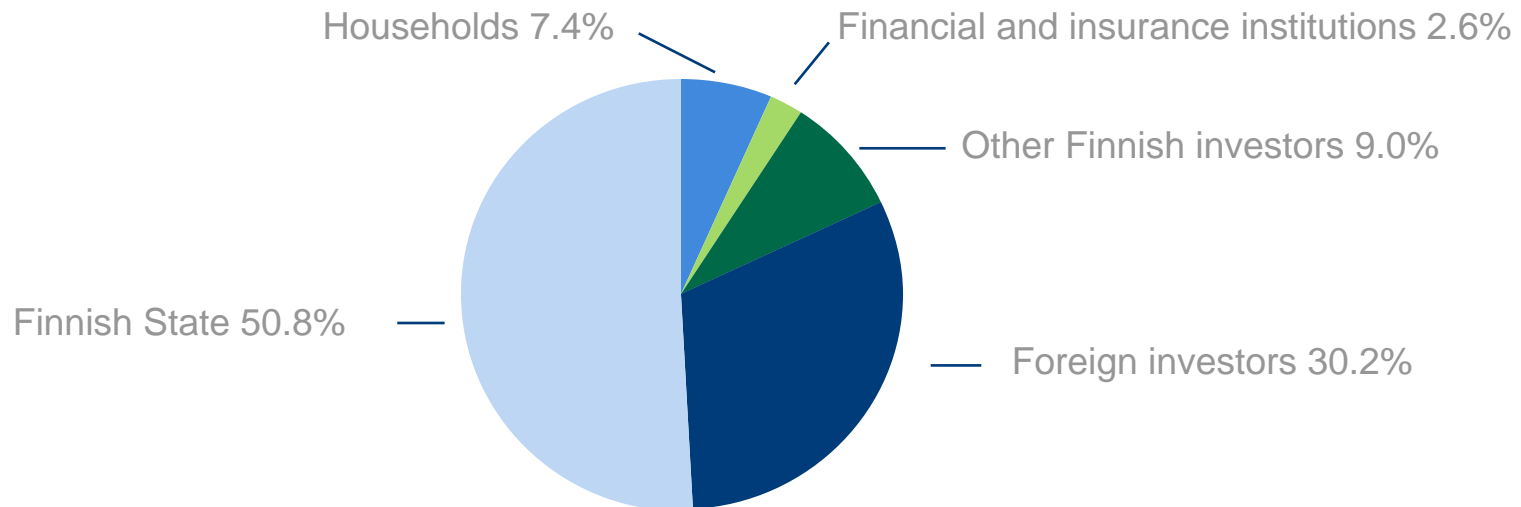


Country responsables: Timo Karttinen / Finland, Norway; Per Langer / Sweden, Poland, Baltics; Alexander Chuvaev / Russia

Improved efficiency, accountability, simplicity

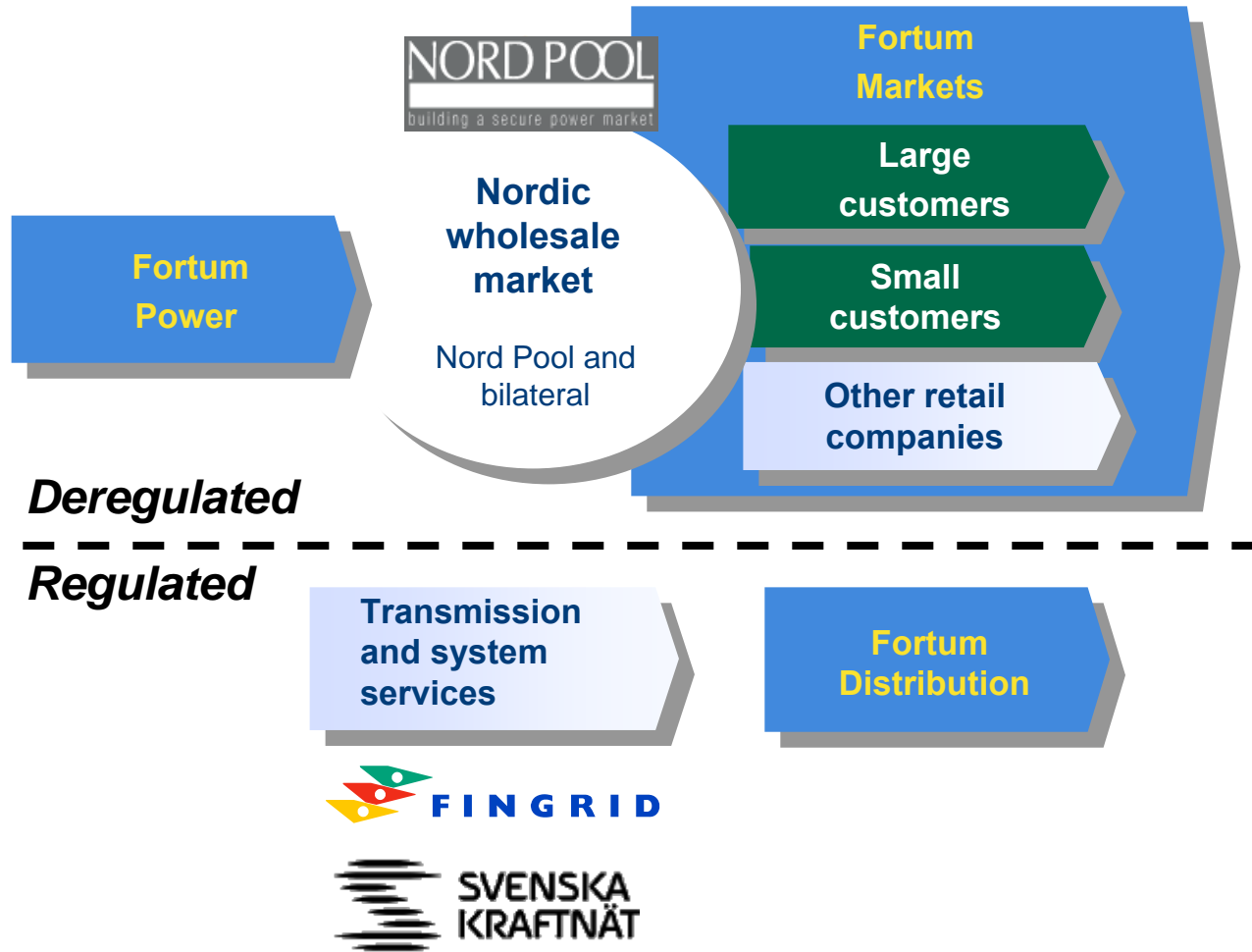
# A leading Nordic power and heat company

- Leading power and heat company in Nordic countries
- Listed at the Helsinki Stock Exchange 1998
- Approximately 100,000 shareholders
- Among the most traded shares in Helsinki stock exchange
- Market cap ~18 billion euros



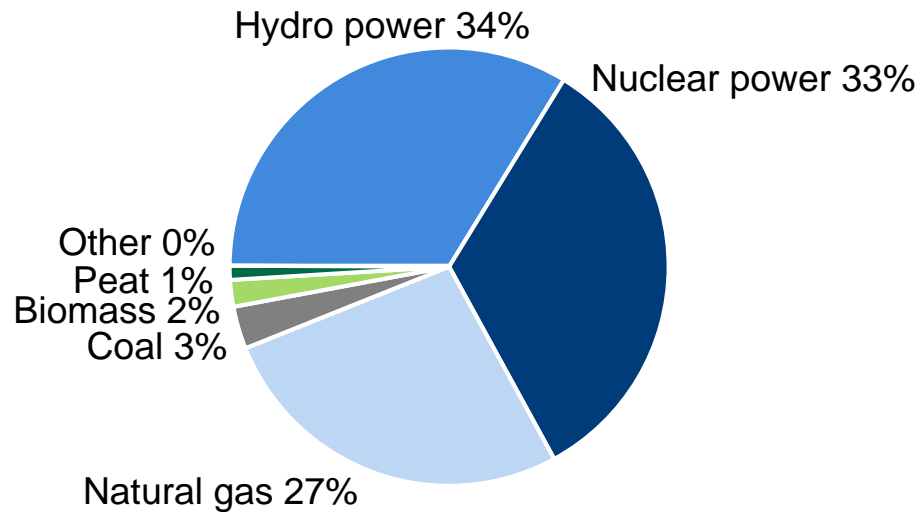
30 November 2010

# Fortum in the Nordic electricity value chain



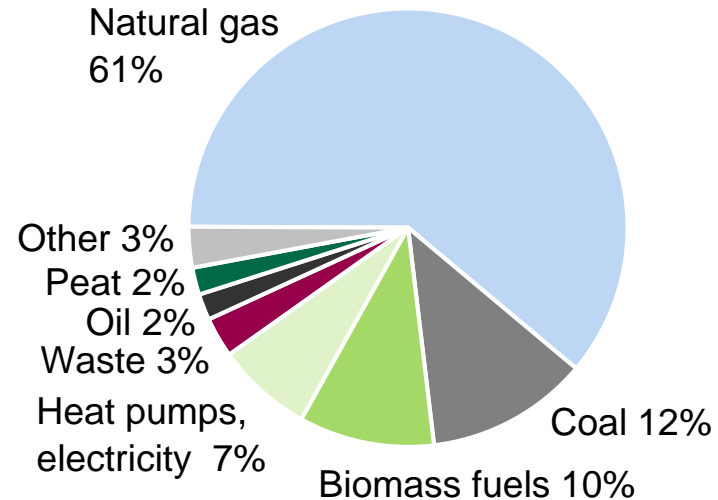
# A portfolio of hydro, nuclear and energy efficient CHP\* – CHP using mainly natural gas in Russia

## Fortum's power generation in 2009



**Total generation 65.3 TWh**  
(Generation capacity 13,940 MW)

## Fortum's heat production in 2009

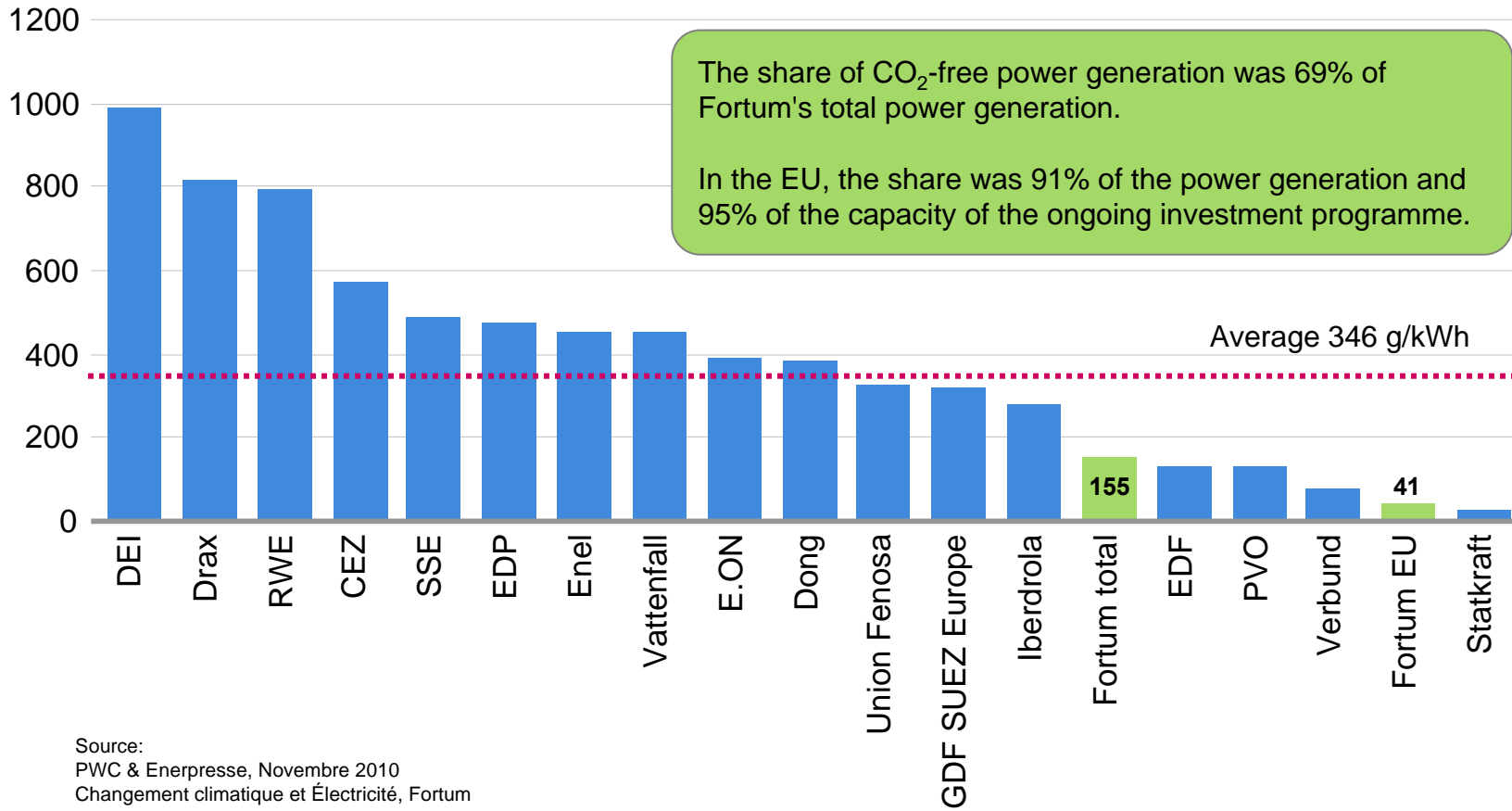


**Total production 48.8 TWh**  
(Production capacity 24,330 MW)

\* Combined heat and power production

# Fortum's carbon exposure among the lowest in Europe

g CO<sub>2</sub>/kWh electricity, 2009



# Fortum's investment programme

– Nordic region, Poland and Baltic countries

Project	Electricity, MW	Heat, MW	Commissioned
Olkiluoto 3, Finland	400		2013
Swedish nuclear upgrades	260		by 2013
- Forsmark 3 upgrade (to be decided)	30		post 2013
Refurbishing of hydro power	20-30		annually
Czestochowa, Poland (coal/biomass CHP)	65	120	Q4/2010
Pärnu, Estonia (coal/biomass CHP)	20	45	Q4/2010
Brista, Sweden (waste CHP)	20	57	2013
Klaipeda, Lithuania (biofuel/waste CHP)	20	50	2013
<b>Total by ~2013</b>	<b>~900</b>	<b>~300</b>	

**Electricity capacity around 900 MW**  
**~95% CO<sub>2</sub>-free**



# Fortum to get 290 MW CO<sub>2</sub> free capacity through upgrades in Sweden

- Two reactors in process to be completed and three to be implemented in coming years
- Fortum's share of potential electricity generation after upgrades is about 2 TWh/a

Reactor	Increase 100% (MW)	Comp- letion (act/est)	Fortum's share	
			Capacity after estimate (MW)	Annual generation estimate (TWh/a)
OKG 1	0	-	205	~2
OKG 2	30 + 180	2009, 2012 - 13	363	~3
OKG 3	255	2009 -10	607	~5
FKA 1	120	2011	257	~2
FKA 2	120	2009 -10	259	~2
FKA 3	170	>2013	270	~2
<b>Total</b>			<b>1,961*</b>	<b>~15</b>
<b>Capacity upgrade effect</b>			<b>291</b>	<b>~2</b>

Capacity increase and completion timetable based on recent estimate (Nord Pool). At 31.12.2009 Fortum's share of Swedish nuclear capacity was 1,778 MW

\* Capacity increase at O3 already done (~110MW)



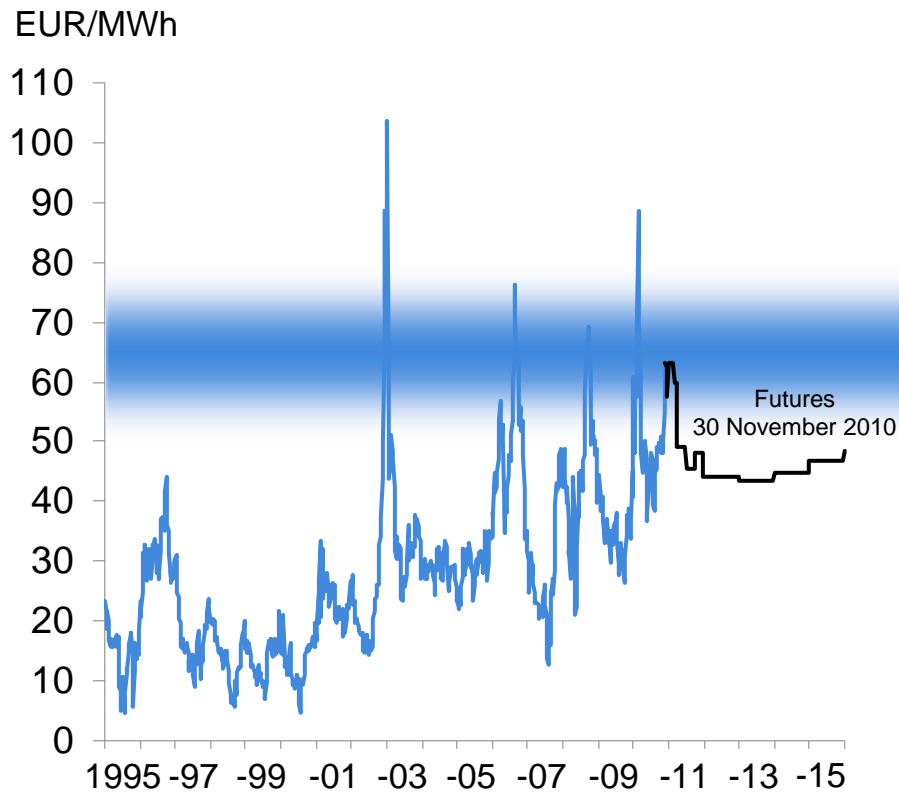
Fortum today

European power markets

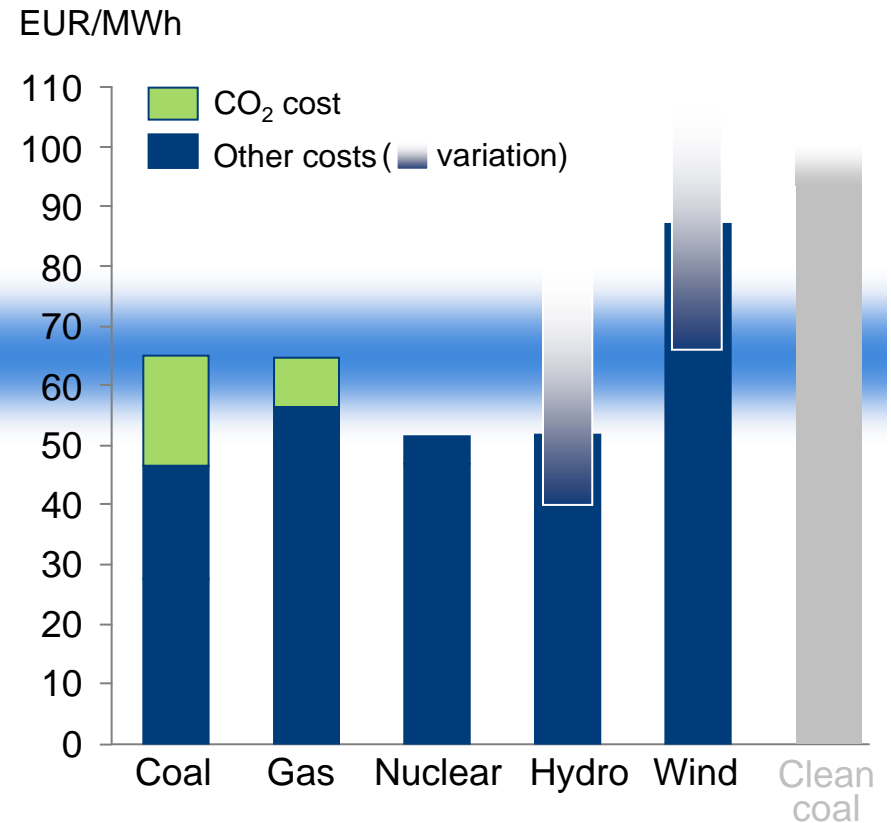
Russia

Financials and outlook

# New capacity, except nuclear, will require over 60 EUR/MWh power price



Source: Nord Pool Spot, NASDAQ OMX Commodities Europe

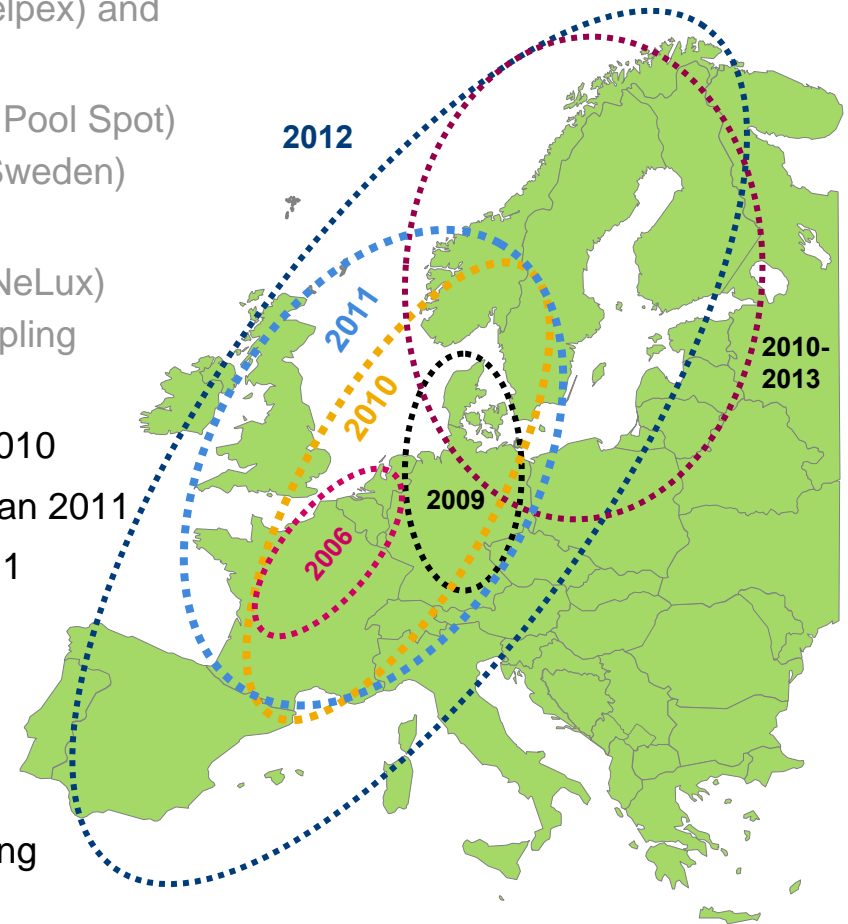


Estimated lifetime average cost in nominal 2014 terms.  
Large variations in cost of new hydro and wind due to location and conditions.

# Market coupling milestones

## - cross-border power flows optimised by power exchanges

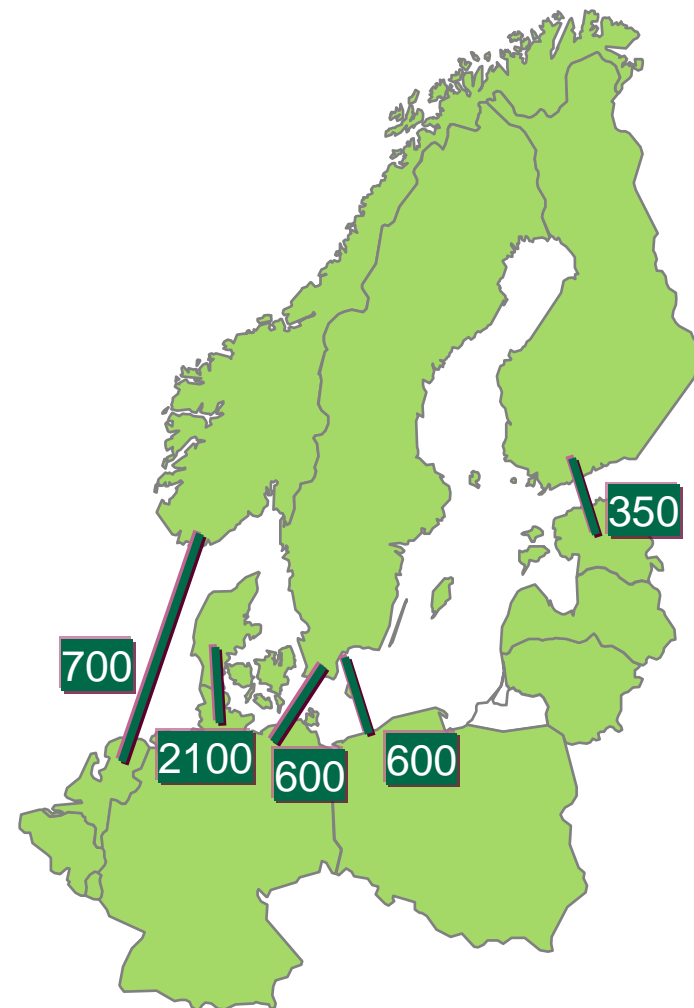
- Market coupling between Netherlands (APX), Belgium (Belpex) and France (Powernext) since 2006
- Market coupling Germany (EPEX Spot) – Denmark (Nord Pool Spot) started in November 2009 with Baltic Cable (Germany – Sweden) included in May 2010
- Market coupling for Central Western Europe (DE, FR, BeNeLux) started in November 2010 combined with a continued coupling mechanism with Nord Pool Spot
- NorNed cable (NO-NL) due to be included in December 2010
- Poland to be coupled with Nord Pool Spot in Dec 2010 / Jan 2011
- UK coupling to be started through BritNed cable during 2011
- The TSOs and power exchanges are developing a single market coupling for the whole western Europe by 2012
- Estonian price area in Nord Pool Spot since April 2010 with full integration of the Baltic States during 2011–2013
- EU's European Target Model for cross-border power trading sets 2015 as deadline for an EU-wide market coupling



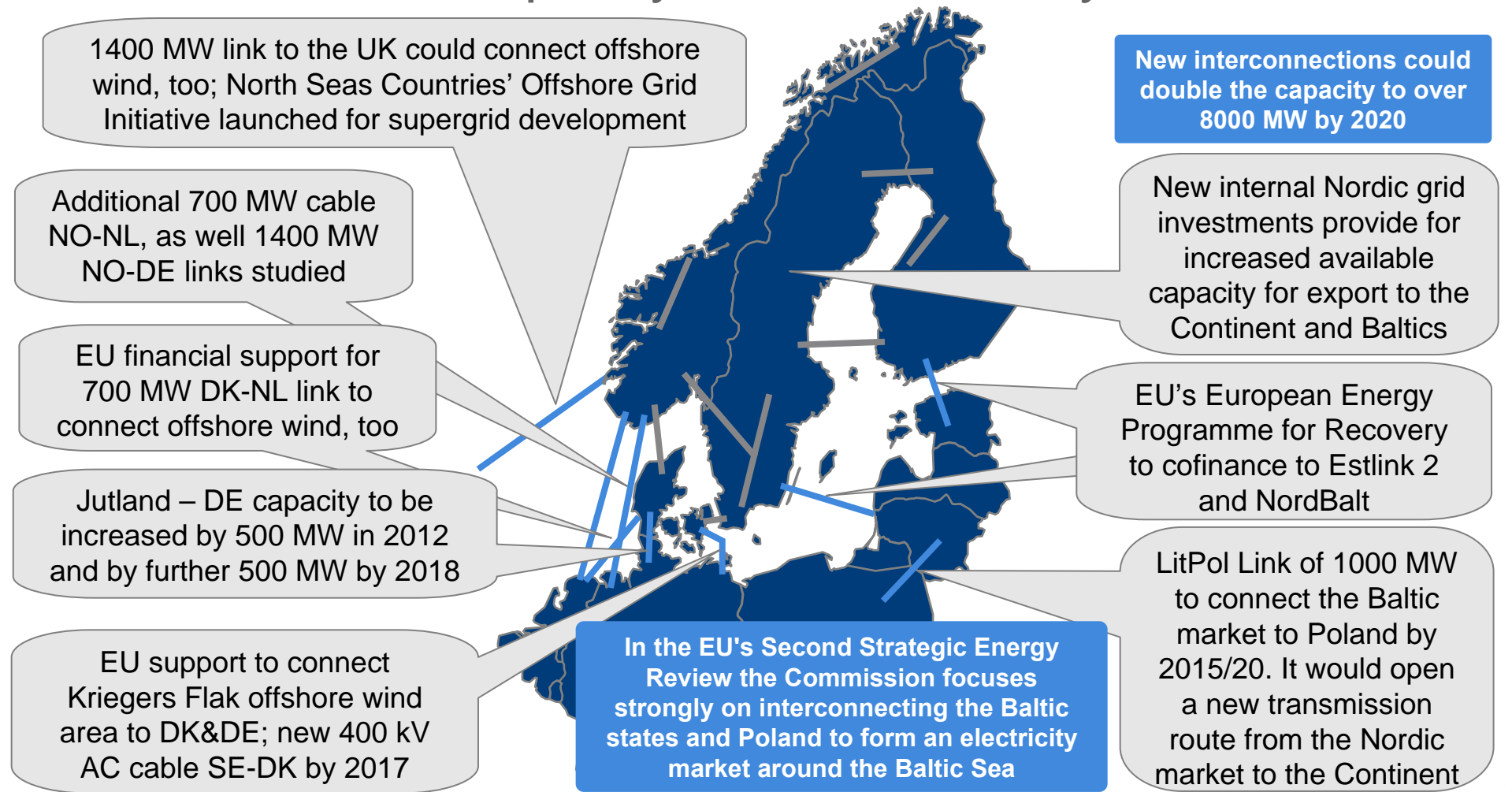
# Current transmission capacity from Nordic area to Continental Europe is ~4000 MW

Countries	Transmission capacity MW	
	From Nordel	To Nordel
Denmark - Germany	2 100	1 550
Sweden - Germany	600	600
Sweden - Poland	600	600
Norway - Netherlands	700	700
<b>Total</b>	<b>4 000</b>	<b>3 450</b>

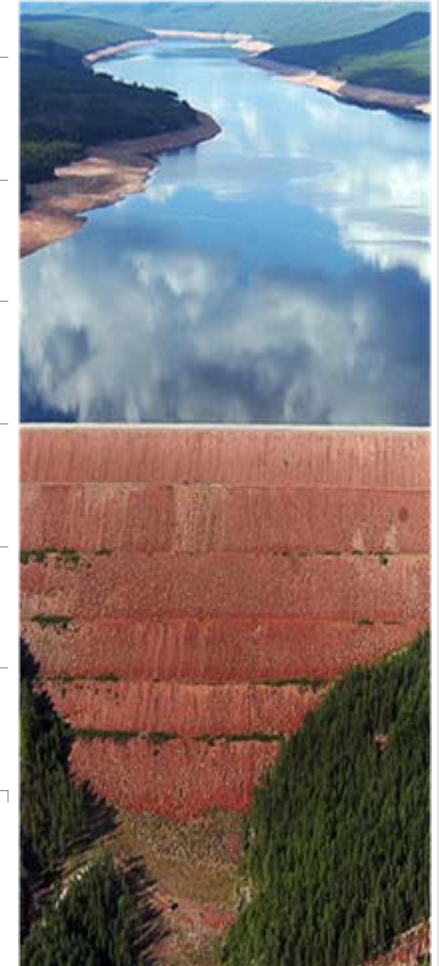
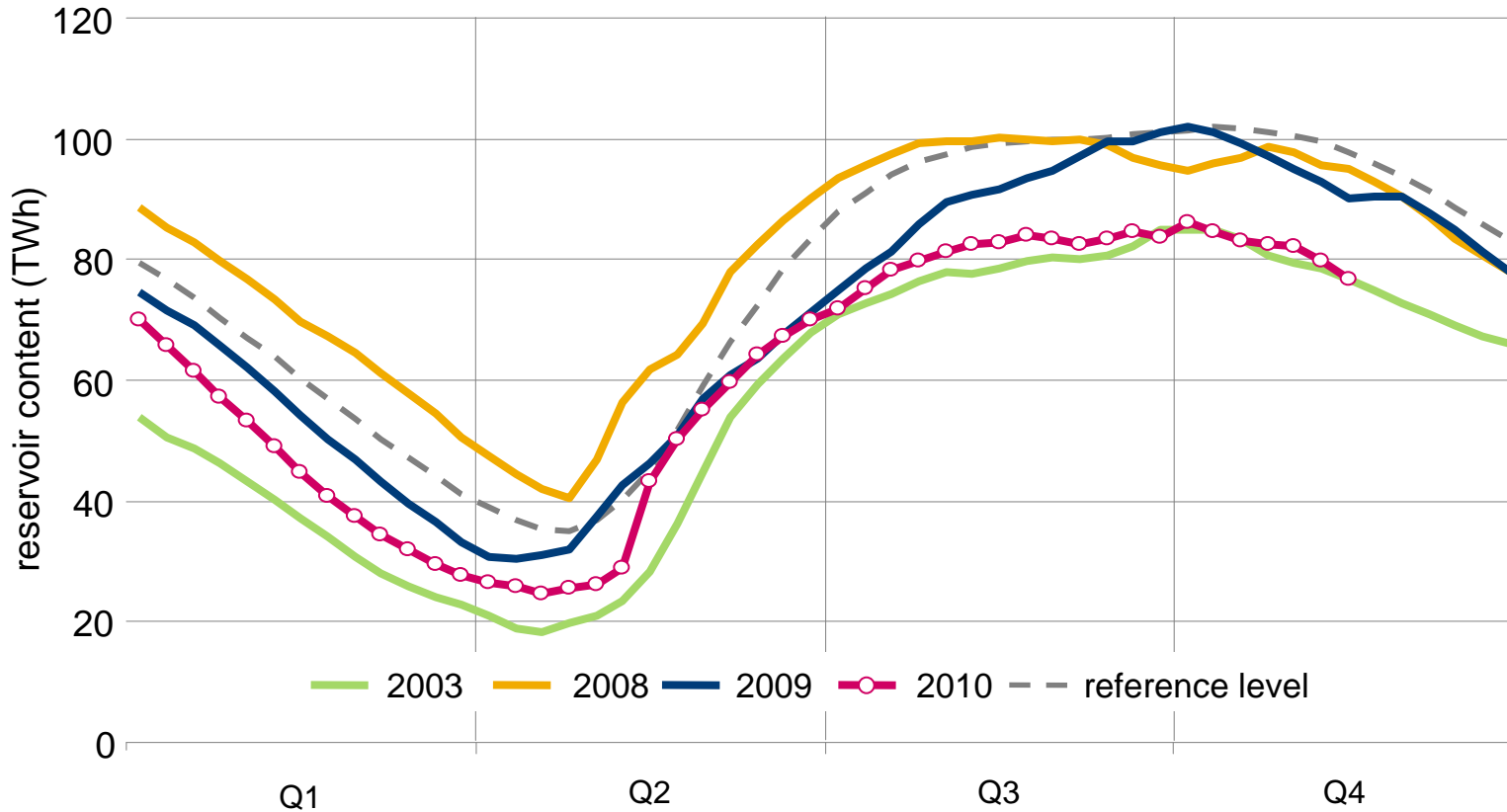
- Theoretical maximum in transmission capacity ~35 TWh per annum
- Net export from Nordic area to Continental Europe in 2008 was ~15 TWh and in 2009 ~5 TWh
- Approximately 20 TWh net export fairly easily reachable



# Nordic and Continental markets are integrating – interconnection capacity could double by 2020

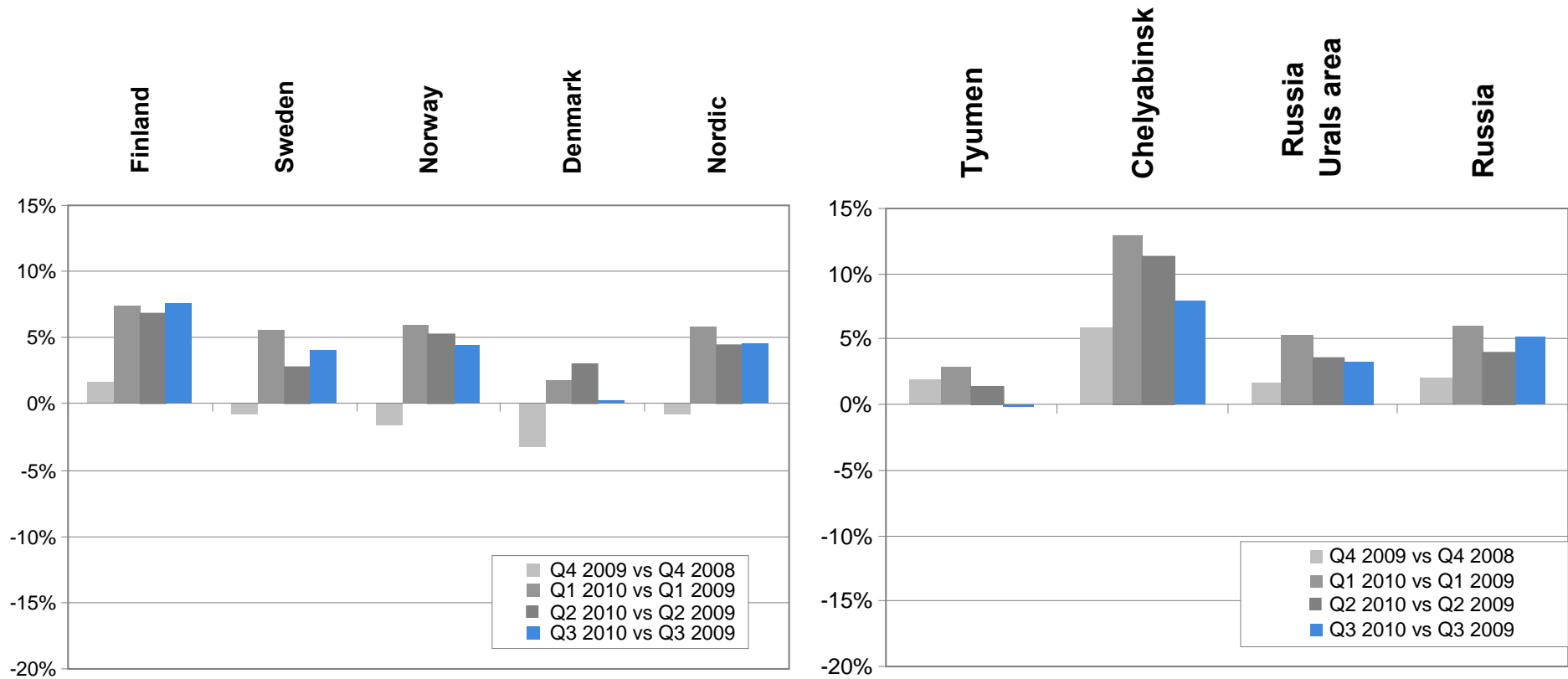


# Nordic water reservoirs below normal



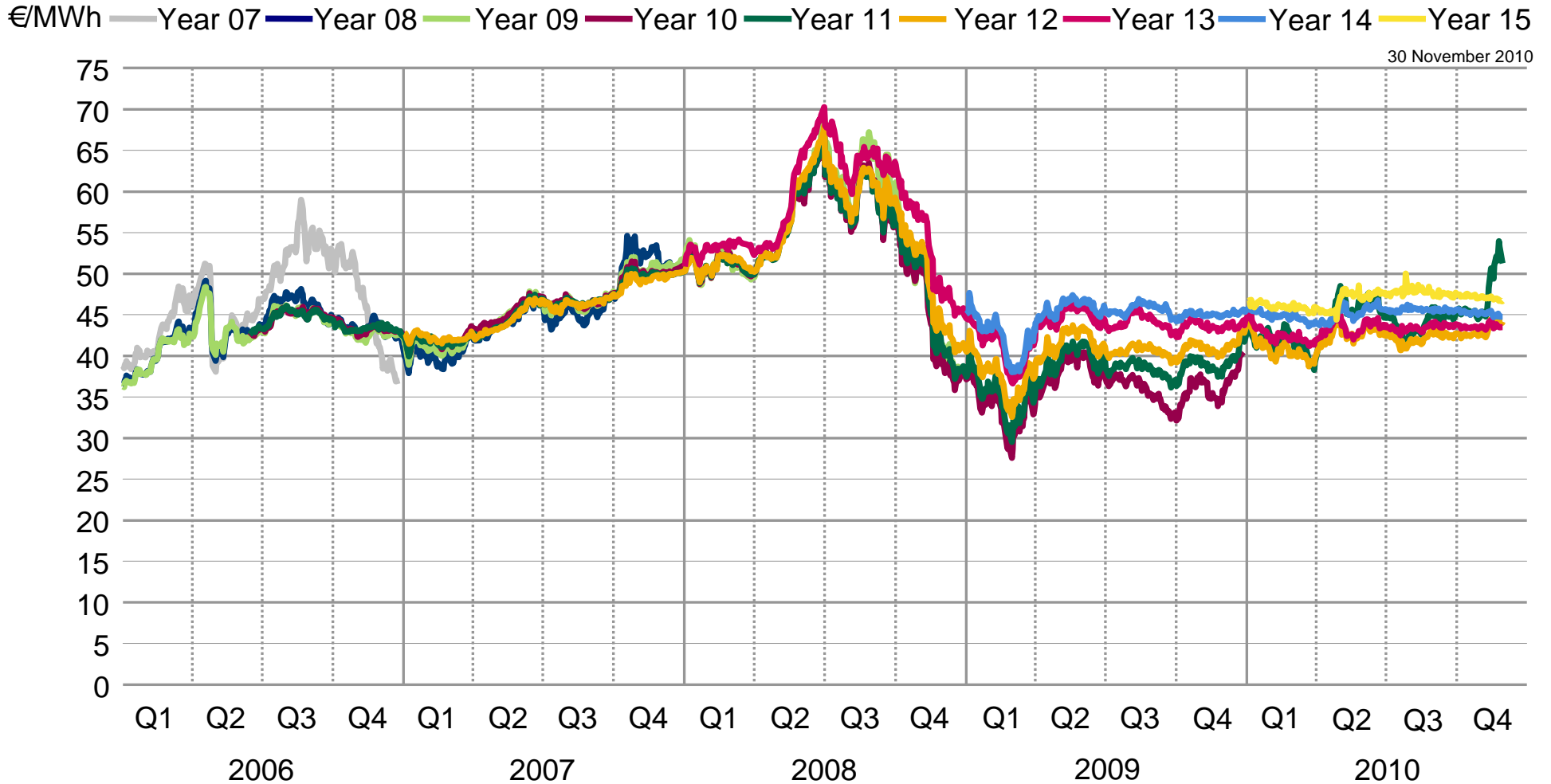
Source: Nord Pool Spot

# Increased power consumption



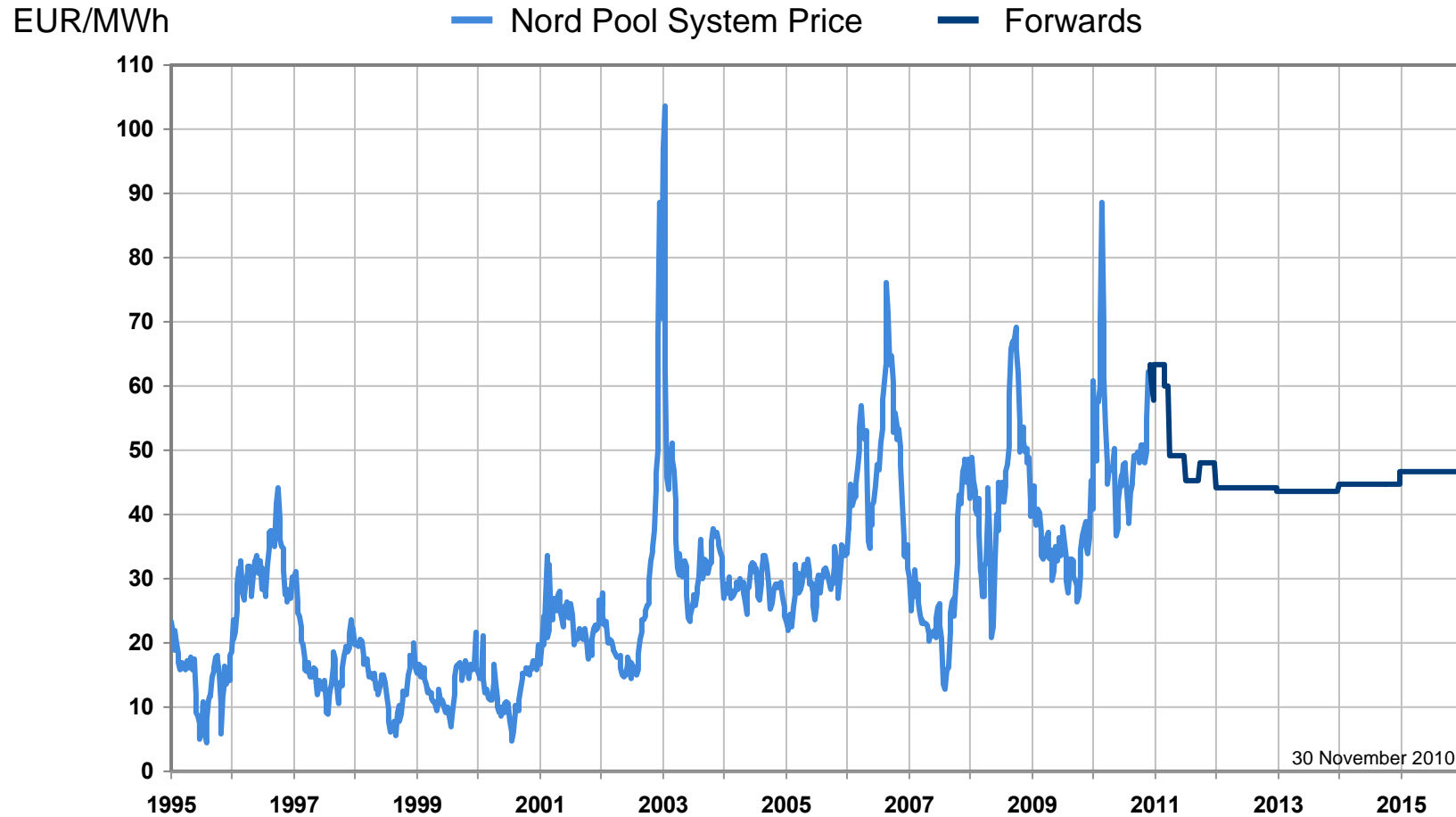
Fortum currently expects Nordic power demand to recover back to the 2008 level by 2012-2014

# Nordic year forwards



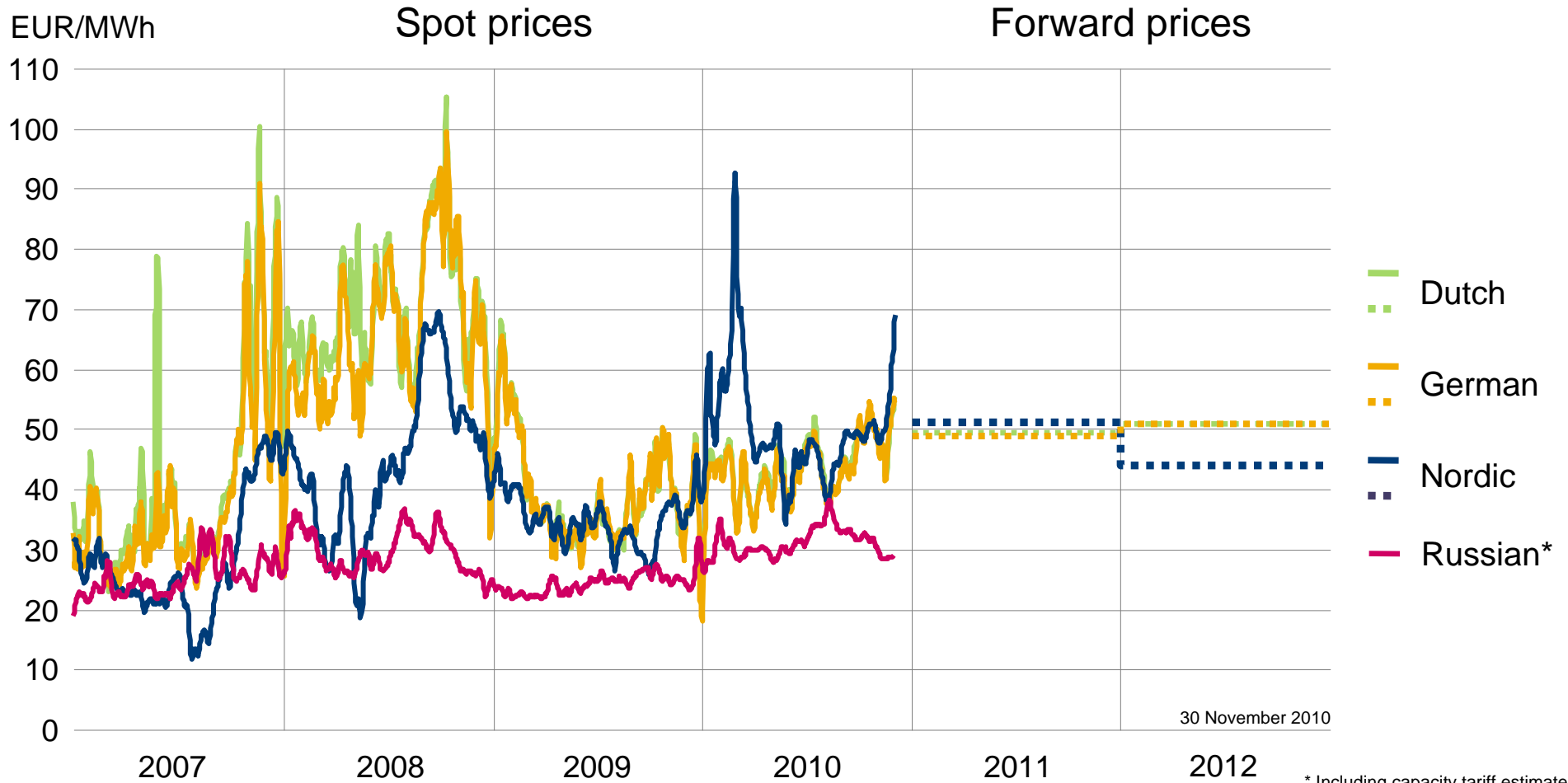
Source: NASDAQ OMX Commodities Europe

# Wholesale price for electricity



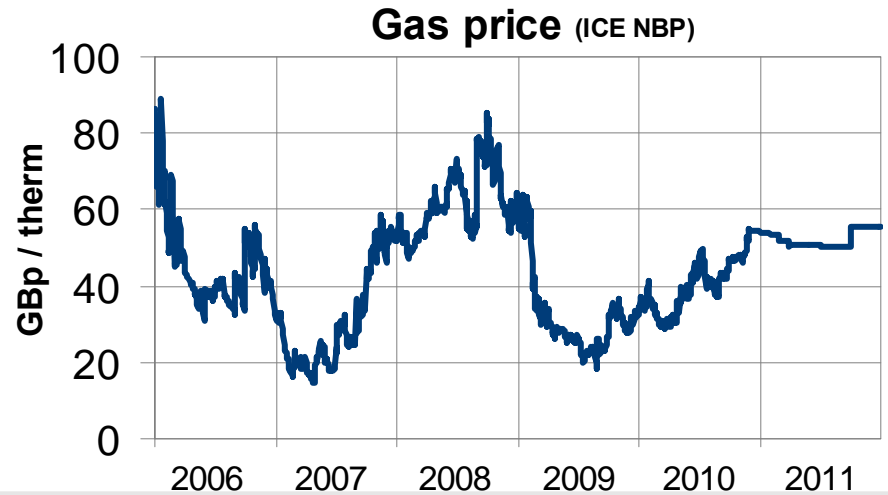
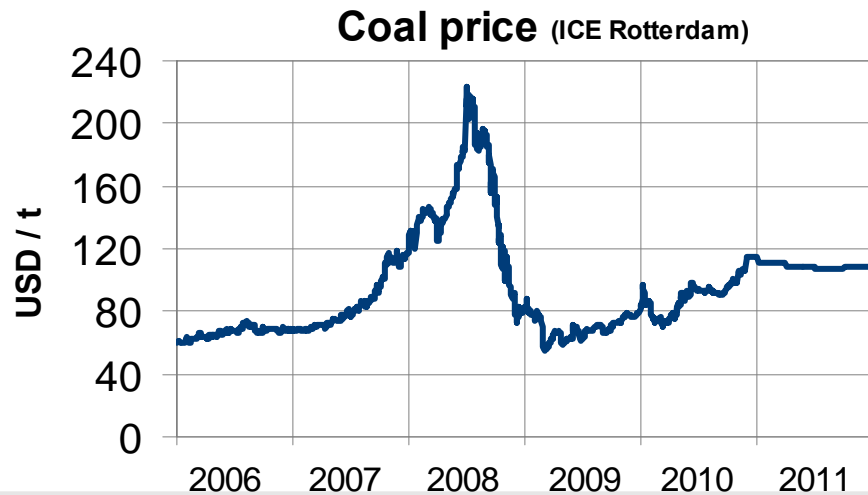
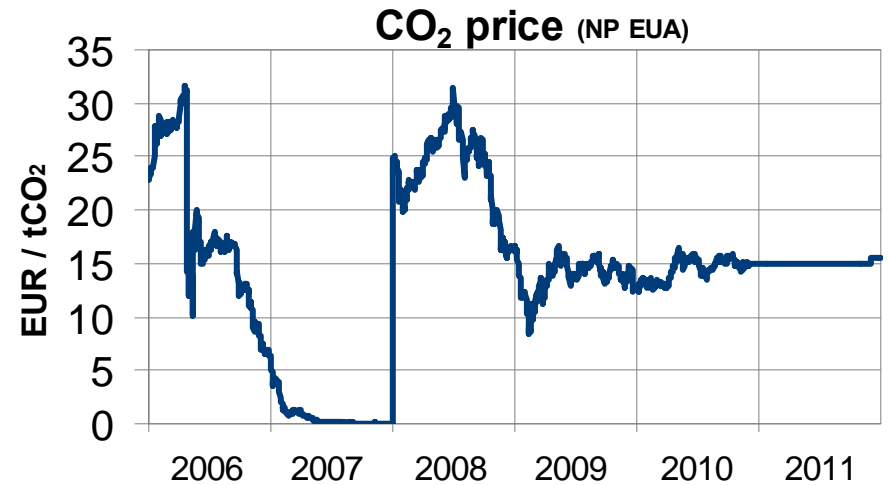
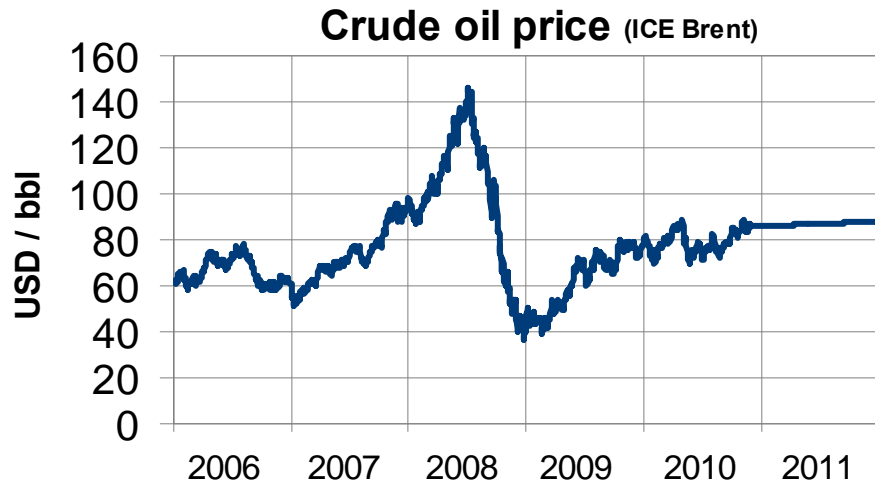
Source: Nord Pool Spot, NASDAQ OMX Commodities Europe

# Wholesale prices for electricity



\* Including capacity tariff estimate.  
E.g 9.4 €/MWh for 2009 and 2010.

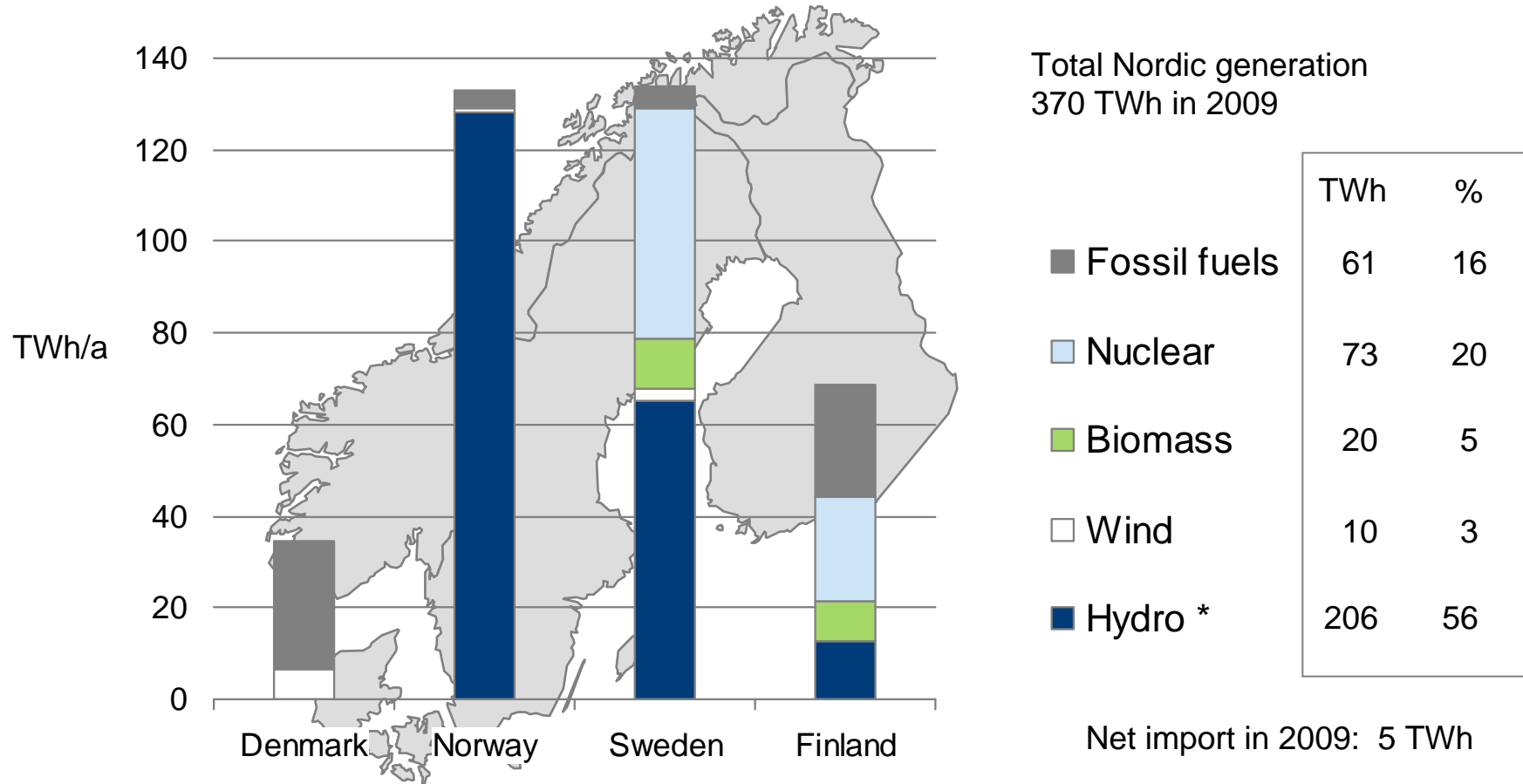
# Fuel and CO2 allowance prices



Source: ICE, NASDAQ OMX Commodities Europe

# Nordic power generation

– dominated by hydro, but fossil needed



Source: ENTSO-E Memo 2009, wind generation Eurostat

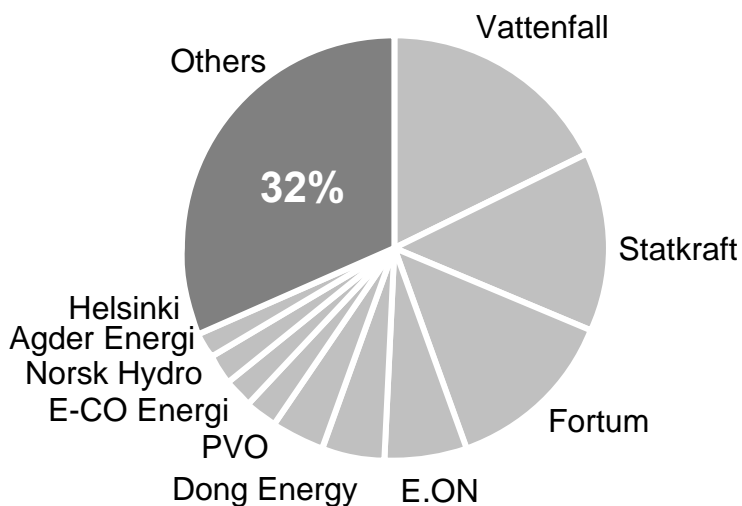
\*) Normal annual Nordic hydro generation 200 TWh, variation +/- 40 TWh.

# Still a highly fragmented Nordic power market

## Power generation

370 TWh

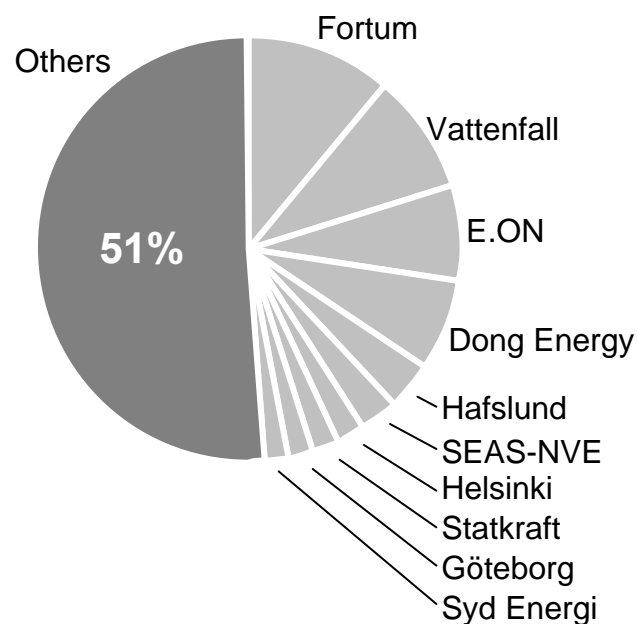
>350 companies



## Electricity distribution

14 million customers

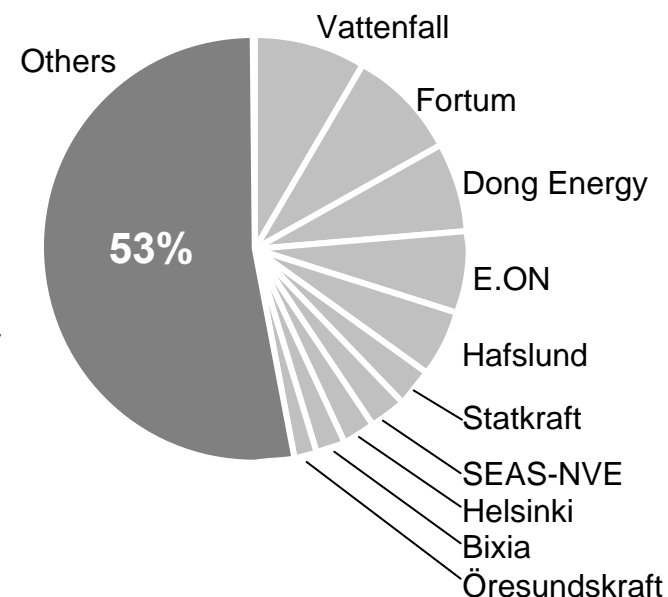
~500 companies



## Electricity retail

14 million customers

~350 companies



Current market shares based on 2009 figures, active players



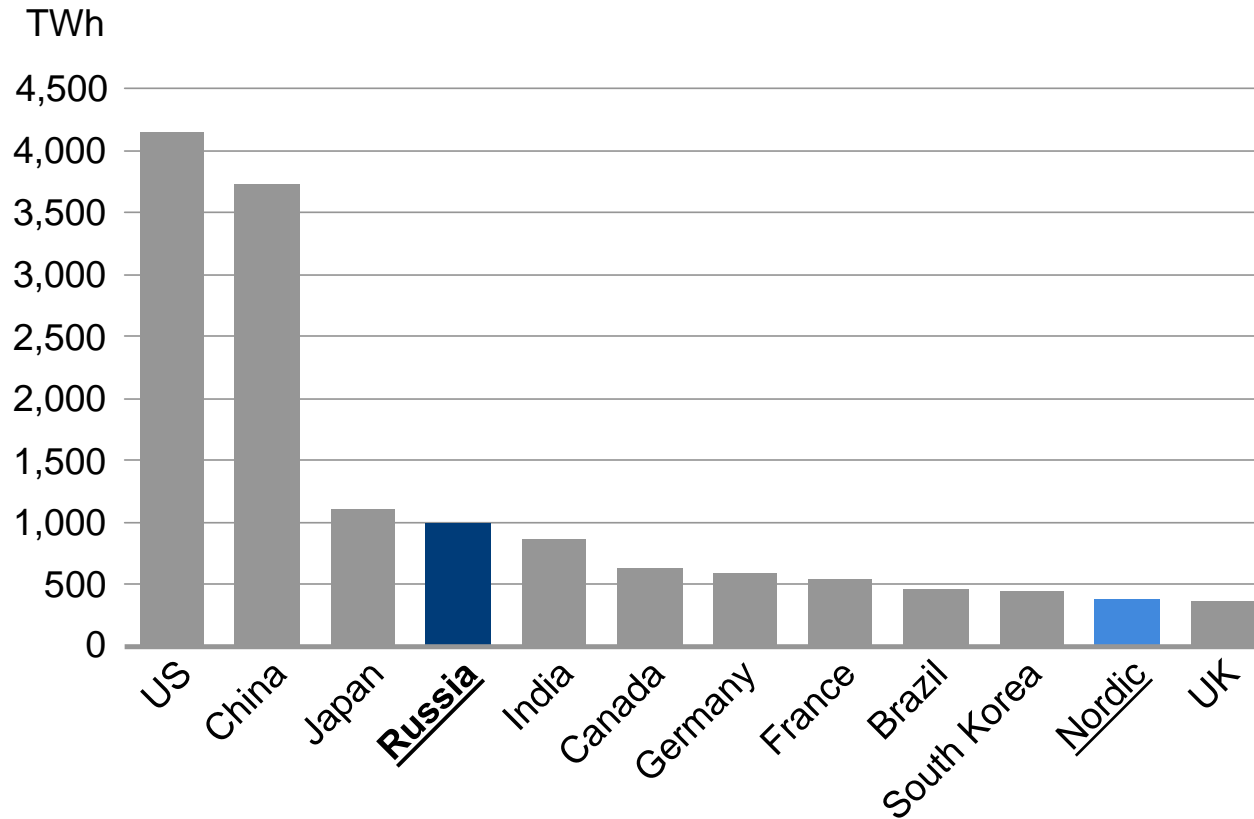
Fortum today

European power markets

Russia

Financials and outlook

# Russia is the World's 4th largest power market



Data 2009 based on gross output.  
Source: BP Statistical Review of World Energy June 2010

# Fortum - a major player in Russia

## OAo Fortum (former TGC-10)

- Operates in the heart of Russia's oil and gas producing region, fleet mainly gas-fired CHP capacity
- 16 TWh power generation, 26 TWh heat production in 2009; more than Fortum's Nordic heat sales
- Investment programme to add 85%, almost 2,400 MW to power generation capacity
- Annual efficiency improvement approximately EUR 100 million in 2011

## TGC-1

- Slightly over 25% of territorial generating company TGC-1 operating in north-west Russia
- ~6,350 MW electricity production capacity (appr. 50% hydro), ~27 TWh/a electricity, ~31 TWh/a heat



# Power market liberalisation – two markets

## Capacity market



### Capacity price

- Capacity auctions (next in Oct 2010)
- A higher, fixed capacity price for new capacity (CSA\* agreements, >2007)
- Likely a lower capacity price for old capacity, price caps could limit the price

## Day ahead (spot) wholesale market



### Day ahead spot market price

- Day ahead spot market auction
- 100% liberalised from 1 Jan 2011
- Supply-demand balance and fuel price the key drivers

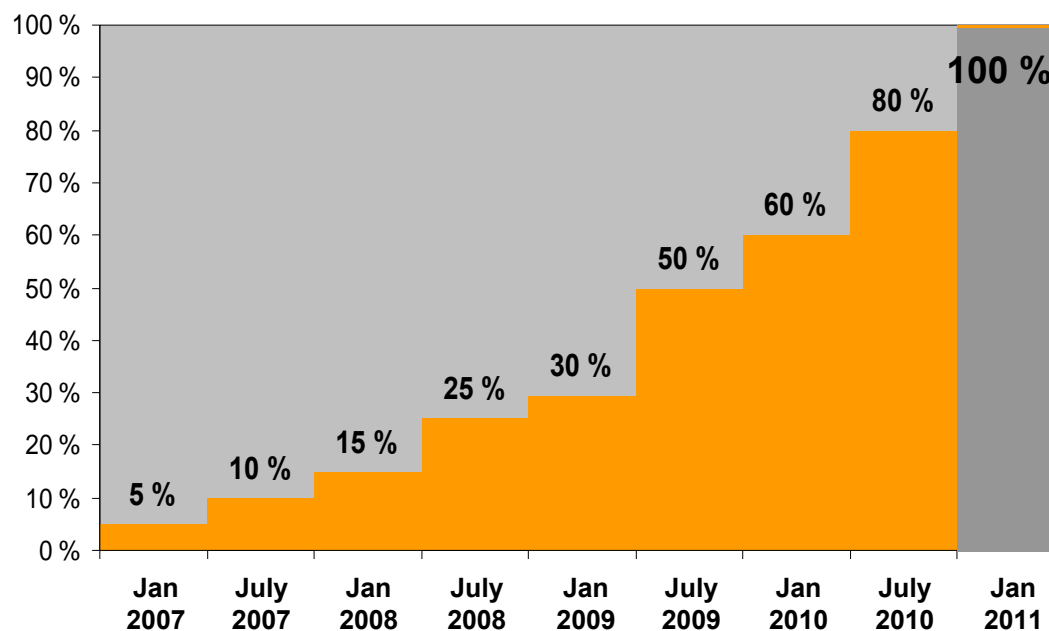
- Capacity market is the intended mechanism for earning a (reasonable) return on invested capital
- Capacity prices are a big part of a power generator's income
  - a typical CHP plant ~35%, CCGT ~55%, of revenues
- In the day ahead (spot) market, the price mechanism is a day ahead hourly auction, variable costs (fuel) a key driver
- Financial market started in June, 2010

\* Capacity supply agreement

# Day ahead wholesale power market 100% liberalised in one month

- Further liberalisation of wholesale power market
  - 100% by 1 January 2011
- The sales to households will remain regulated still after 2011

Share of liberalised trade for existing capacity



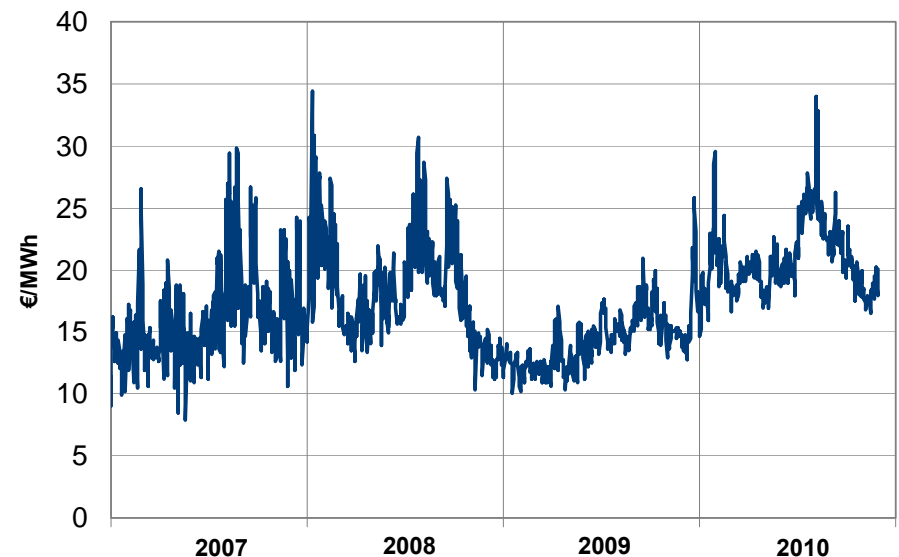
# Day ahead wholesale market prices

– increase driven by recovering demand and gas price

## Key electricity, capacity and gas prices in the OAO Fortum area

	III/2010	III/2009	I-III/2010	I-III/2009	Change
Electricity spot price (market price), Urals hub, RUB/MWh	936	700	842	613	37%
Average regulated electricity price for OAO Fortum, RUB/MWh	607	529	614	533	15%
Average regulated capacity price, tRUB/MW/month	169	186	169	188	-10%
Average regulated gas price in Urals region, RUB/1000 m <sup>3</sup>	2,221	1,837	2,221	1,731	28%

## Day ahead power market prices for Urals



In addition to the power price generators receive a capacity payment.

# Capacity prices for new capacity 3-4 times current old capacity prices

- Long term rules and price parameters approved
- Both “old” and “new” capacity can participate in capacity auctions
- Old capacity (pre 2007) and new capacity priced differently
  - Old capacity is priced by capacity auctions; first auction for 2011 in October 2010; price cap possibility
  - New capacity under capacity supply agreements to receive guaranteed payments
- The payments for new capacity are based on approved pricing formulas
  - Vary according to plant size, fuel, geographic location, capital costs, ...
  - Allow the recovery of capital costs and include return on invested capital; the targeted ROCE level 12-14% (with current government benchmark bond yields)
  - After three years (2014), the regulator will review the earnings from the electricity-only market and can revise the payments, same goes after 6 years.

- “Old” capacity prices will depend on auction outcomes, but likely remain relatively low; potentially price caps could limit price
- “New” capacity prices (under agreements) to be 3-4 times the “old” capacity prices

# New capacity will receive clearly higher payments than the old

## Estimated capacity price for new capacity\*, RUB/MW/month

Region	Gas condensing (CCGT)			Coal condensing	
	>250 MW	150-250 MW	<150 MW	>225 MW	<225 MW
South	500,000	617,000	771,000	1,048,000	1,130,000
Center	524,000	647,000	810,000	1,100,000	1,187,000
Urals	554,000	685,000	858,000	1,165,000	1,257,000
Siberia	845,000	996,000	1,194,000	1,680,000	1,815,000

## Estimated capacity price for new capacity\*\*, EUR/MW

Region	Gas condensing (CCGT)			Coal condensing	
	>250 MW	150-250 MW	<150 MW	>225 MW	<225 MW
South	17	21	26	35	38
Center	18	22	27	37	40
Urals	19	23	29	39	42
Siberia	28	33	40	56	61

## Estimated capacity price for new capacity\*\*, EUR/MWh with a 65% load rate

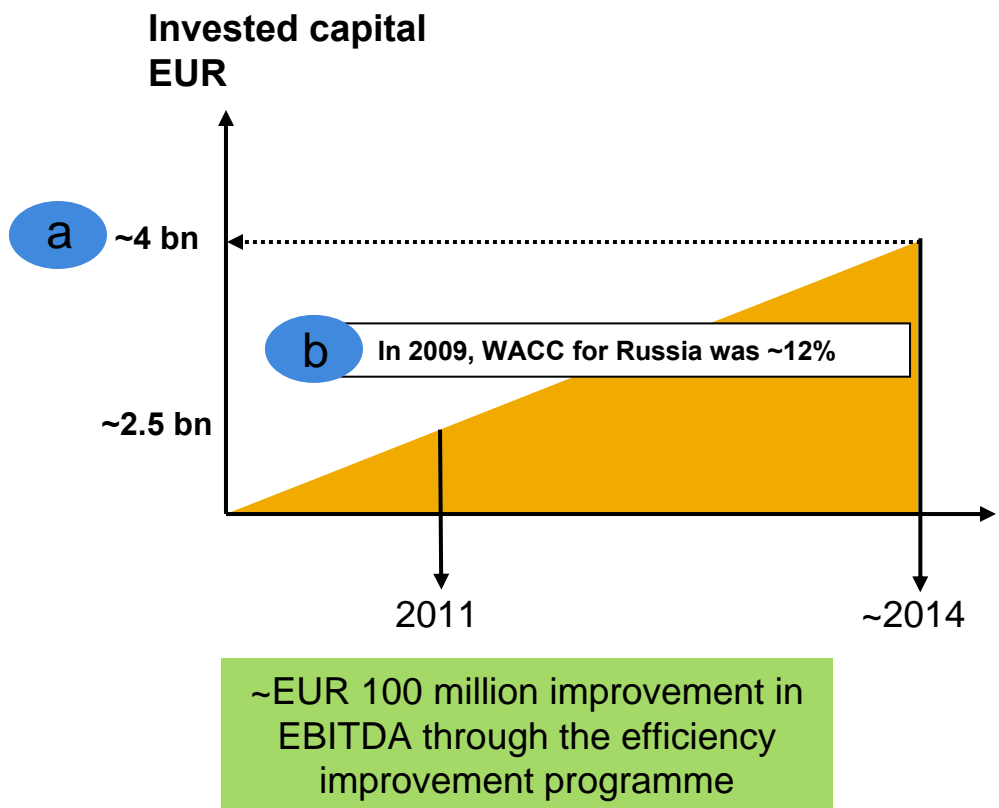
Region	Gas condensing (CCGT)			Coal condensing	
	>250 MW	150-250 MW	<150 MW	>225 MW	<225 MW
South	26	32	40	54	58
Center	27	33	42	57	61
Urals	29	35	44	60	65
Siberia	44	51	62	87	94

Source: Market Council, Troika, Fortum

\*Rate of return 14%, payback period 15 years. YTM of 8.5% for local government bonds (now ~7%)

\*\* RUB/EUR at 40, a month with 31 days

# Long-term financial target will be dictated by basic economic logic



Assuming, having completed the investment programme, an invested capital of

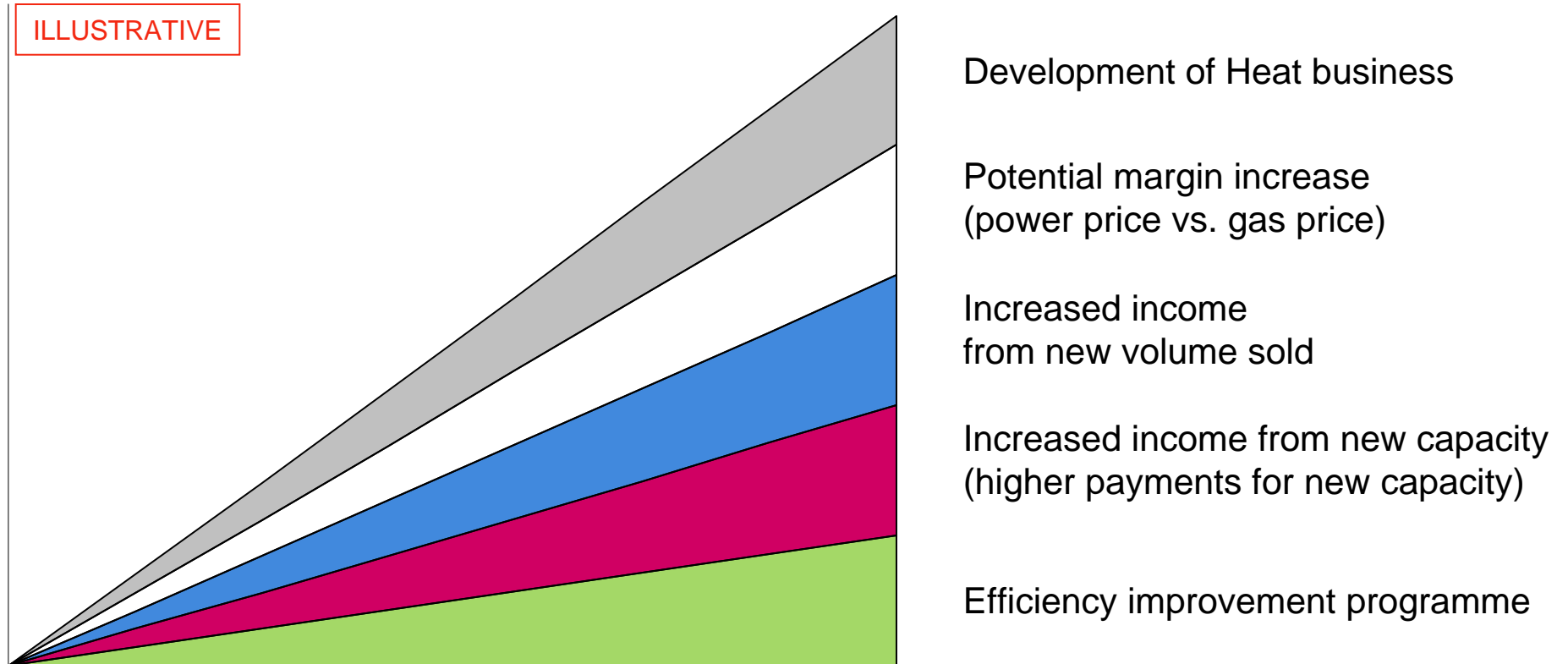
a

... and an unchanged cost of capital

b

The annual comparable operating profit in Russia needs to be in excess of ~EUR 500 million in order to beat to cost of capital (WACC) ...soon after the completion of the investment programme

# The five key drivers for earnings improvement in Russia



# Efficiency improvement programme in Russia: ~100 M€ EBITDA improvement in 2011

- Purchasing
- Portfolio Management and Trading (PMT)
- Heat regulation
- Heat - technical and business improvements
- Generation - technical improvements
- Others

# 85% increase in power generation capacity by the end of 2014 through the investment programme

## Power generation capacity (MW)

Plant	Supply date	Fuel type	Power generation capacity (MW)		Total
			Existing	Planned	
Tyumen CHP-2		Gas	755		755
Tyumen CHP-1	Q1/2011; 2014	Gas	472	<b>231; 2*225</b> (CHP/Condensing)	1153
Tobolsk CHP	Q2/2011	Gas	452	<b>200</b> (Condensing)	652
Chelyabinsk CHP-3	Q2/2011	Gas	360	<b>226</b> (CHP/Condensing)	586
Chelyabinsk CHP-2		Gas, coal	320		320
Argayash CHP		Gas, coal	195		195
Chelyabinsk CHP-1		Gas, coal	149		149
Chelyabinsk GRES		Gas	82		82
Nyagan GRES	2012, 2012, 2013	Gas		<b>3x418</b> (Condensing)	1,254
Boilers		-			
<b>Total</b>			<b>2,785</b>	<b>2,361</b>	<b>5,146</b>



Fortum today

European power markets

Russia

Financials and outlook

# Income statement

MEUR	III/2010	III/2009	I-III/2010	I-III/2009	2009	LTM
Sales	1 152	1 046	4 394	3 872	5 435	5 957
Expenses	-840	-760	-3 007	-2 612	-3 653	-4 048
<b>Operating profit</b>	<b>312</b>	<b>286</b>	<b>1 387</b>	<b>1 260</b>	<b>1 782</b>	<b>1 909</b>
Share of profit of associates and jv's	10	3	41	-1	21	63
Financial expenses, net	-37	-47	-98	-128	-167	-137
<b>Profit before taxes</b>	<b>285</b>	<b>242</b>	<b>1 330</b>	<b>1 131</b>	<b>1 636</b>	<b>1 835</b>
Income tax expense	-45	-39	-236	-211	-285	-310
<b>Net profit for the period</b>	<b>240</b>	<b>203</b>	<b>1 094</b>	<b>920</b>	<b>1 351</b>	<b>1 525</b>
Non-controlling interests	-7	-8	25	14	39	50
EPS, basic (EUR)	0.27	0.24	1.20	1.02	1.48	1.66
EPS, diluted (EUR)	0.27	0.24	1.20	1.02	1.48	1.66

# Comparable and reported operating profit

MEUR	Comparable operating profit		Reported operating profit		Comparable operating profit		Reported operating profit	
	III/2010	III/2009	III/2010	III/2009	I-III/2010	I-III/2009	I-III/2010	I-III/2009
Power	267	308	256	297	962	1 063	1 003	1 036
Heat	-12	-13	-15	-11	153	127	179	143
Distribution	61	47	62	47	216	182	228	182
Electricity Sales	11	7	12	-7	8	11	6	-8
Russia	-16	-20	14	-19	-9	-28	37	-28
Other	-9	-13	-17	-21	-38	-37	-66	-65
<b>Total</b>	<b>302</b>	<b>316</b>	<b>312</b>	<b>286</b>	<b>1 292</b>	<b>1 318</b>	<b>1 387</b>	<b>1 260</b>

# Cash flow statement

MEUR	III/2010	III/2009	I-III/2010	I-III/2009	2009	LTM
<b>Operating profit before depreciations</b>	452	414	1 803	1 634	2 292	2 461
Non-cash flow items and divesting activities	-25	31	-98	50	46	-102
Financial items and fx gains/losses	-126	-51	-449	248	146	-551
Taxes	-93	-74	-248	-205	-239	-282
<b>Funds from operations (FFO)</b>	<b>208</b>	<b>320</b>	<b>1 008</b>	<b>1 727</b>	<b>2 245</b>	<b>1 526</b>
Change in working capital	65	22	208	141	19	86
<b>Total net cash from operating activities</b>	<b>273</b>	<b>342</b>	<b>1 216</b>	<b>1 868</b>	<b>2 264</b>	<b>1 612</b>
Paid capital expenditures	-216	-228	-702	-579	-845	-968
Acquisition of shares	-6	-4	-7	-57	-85	-35
Other investing activities	10	-7	82	-17	-44	55
<b>Cash flow before financing activities</b>	<b>61</b>	<b>103</b>	<b>589</b>	<b>1 215</b>	<b>1 290</b>	<b>664</b>

# Fortum Group financial targets

• Return on capital employed 12%

• Return on shareholder's equity 14%

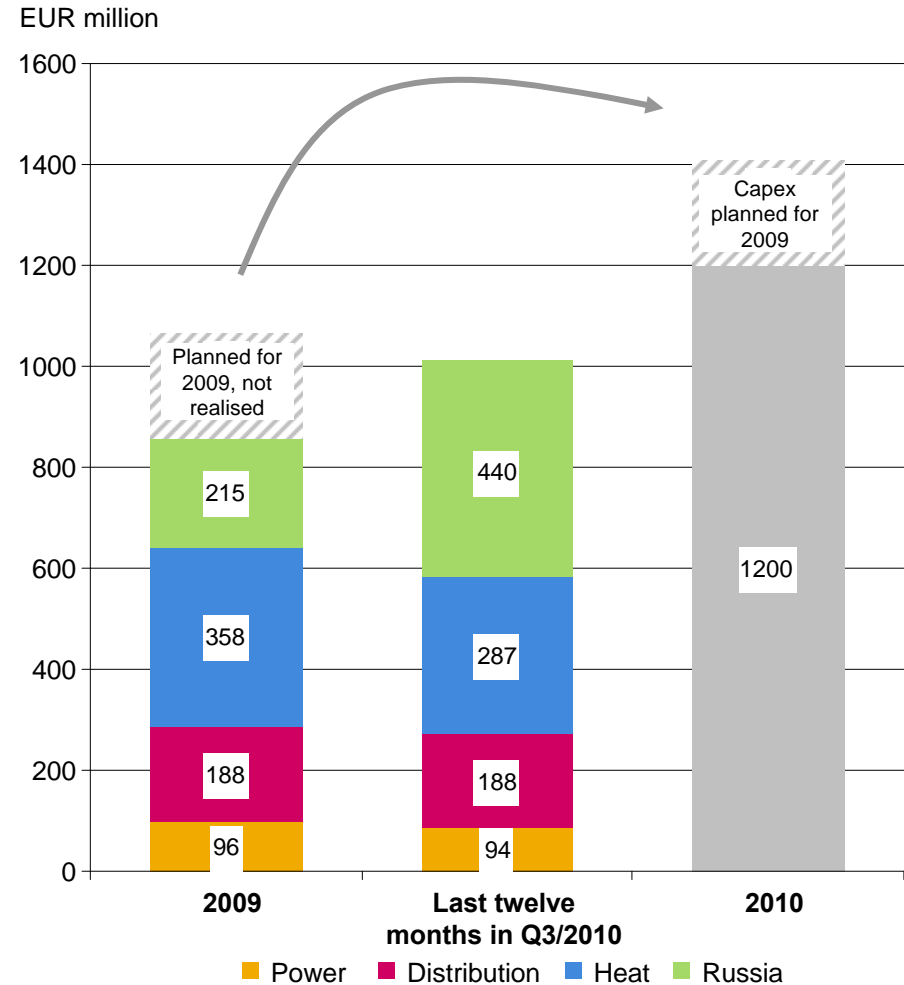
• Net debt/EBITDA ~3

# Key ratios

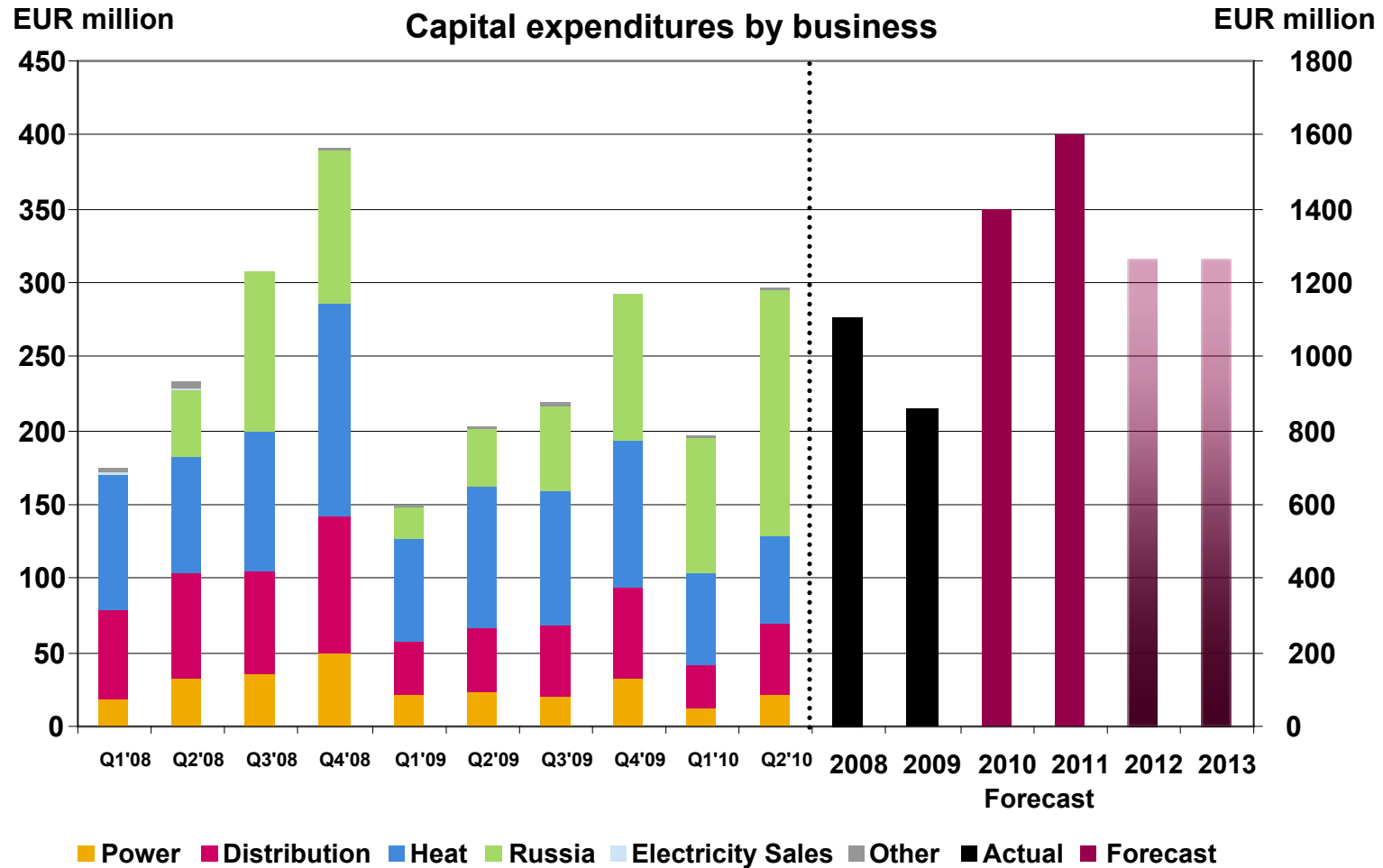
<b>MEUR</b>	<b>LTM</b> in Q3 '10	<b>LTM</b> in Q2 '10	<b>2009</b>
EBITDA	2 461	2 423	2 292
Net cash flow from operations	1 612	1 681	2 264
Interest-bearing net debt	6 608	6 506	5 969
Equity	8 736	8 662	8 491
Balance sheet total	21 202	20 606	19 841
Net debt/EBITDA	2.7	2.7	2.6
Return on capital employed (%)	12.9	12.8	12.1
Return on shareholders' equity (%)	17.9	18.0	16.0

# Capital expenditures lifted by Russia...

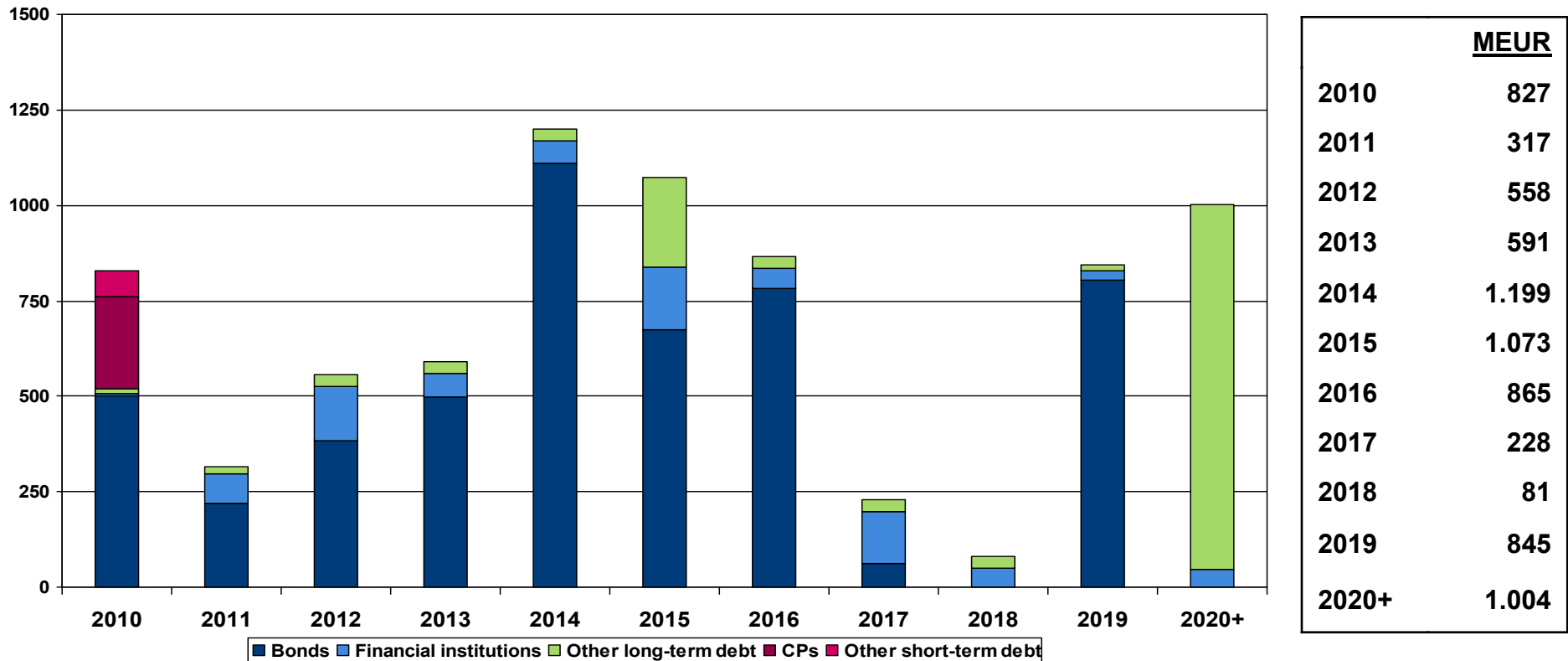
- 2009 capex EUR 862 million
- 2010 capex is expected to be around EUR 1.4 billion
  - shifting from 2009
  - driven mainly by Russian investments
- 2011 capex currently estimated at EUR ~1.6 billion
- 2012-2013 capex expected to be above the upper end of “normal” EUR 0.8-1.2 billion range



...also in medium term future, 2010-2013



# Debt maturity profile



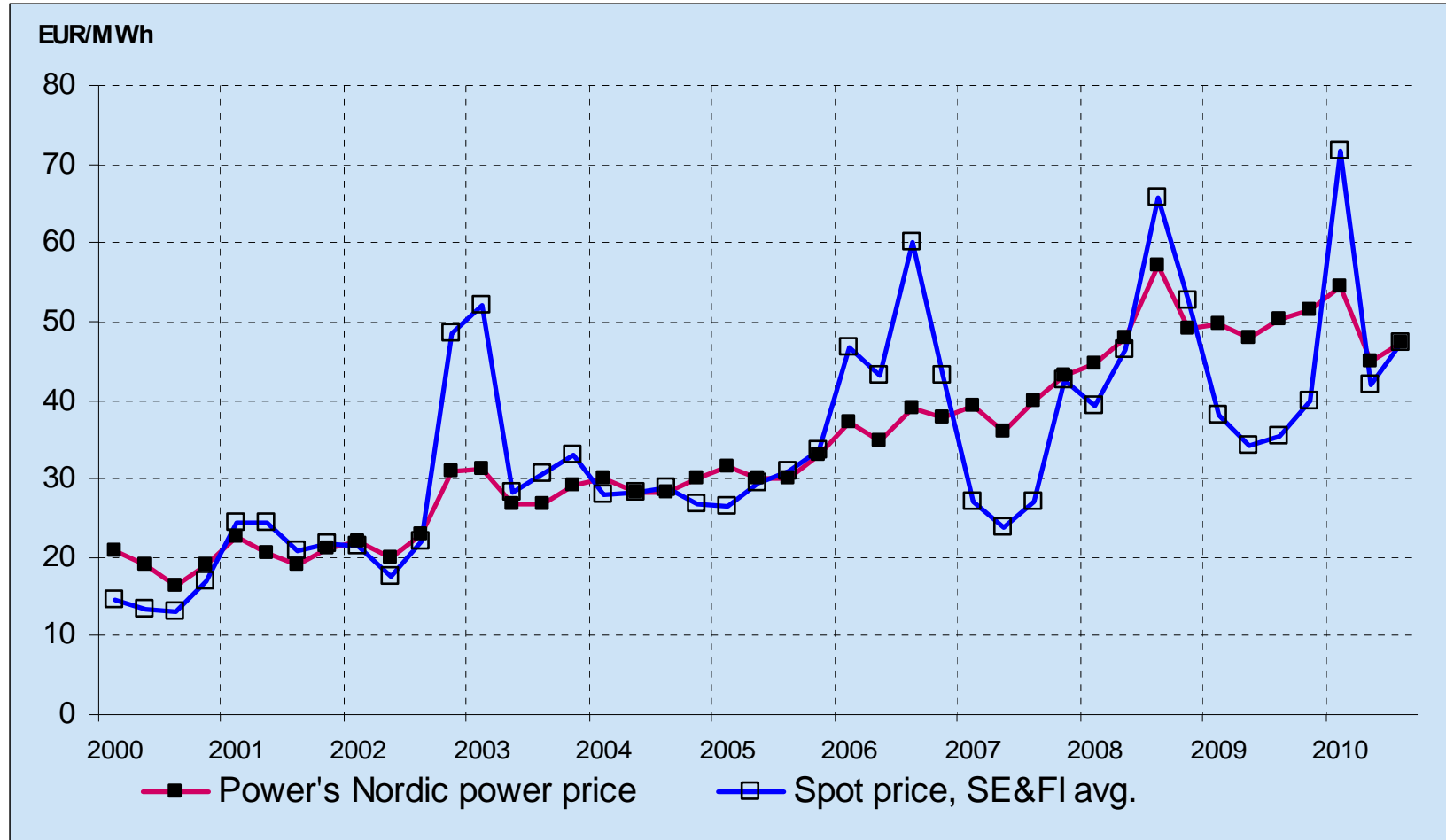
Duration (years)  
 Average interest rate (incl. swaps and forwards)  
 Portion of floating / fixed debt

	per 30 Sept, 2010	per 31 December, 2009
Duration (years)	2,0	1,8
Average interest rate (incl. swaps and forwards)	3,3 %	3,4 %
Portion of floating / fixed debt	62 / 38 %	62 / 38 %

# Liquidity at the end of Q3/2010

MEUR	Available	Outstanding	Total amount
<b><u>SHORT TERM FINANCING</u></b>			
<b>Commercial Paper Programmes</b>			
<i>Finnish CP Programme</i>	441	59	500
<i>SEK 5.000 M Swedish CP Programme</i>	362	185	547
	803	244	1 047
<b><u>LIQUID FUNDS AND COMMITTED CREDIT LINES</u></b>			
<b>Committed Credit Lines</b>			
<i>Short Term</i>	217	0	217
<i>Long Term</i>	2 700	0	2 700
	2 917	0	2 917
<b>Liquid Funds</b>			
<i>Cash and cash equivalents</i>	971		
<i>Bank Deposits over 3 months</i>	9		
	980		
<i>of which in Russia</i>	452		
<b>Total Available Cash and Committed Financing</b>	<b>3 897</b>		

# Hedging improves stability and predictability



# Hedging of Power Division's Nordic sales

## Status at the end of September 2010

(Status at the end of June 2010)

	<u>Hedge ratio</u>	<u>Hedge price</u>
rest of 2010	~ 80% (~80%)	~ EUR 45 per MWh (~ EUR 44 per MWh)
2011	~ 70% (~60%)	~ EUR 44 per MWh (~ EUR 44 per MWh)
2012	~ 35% (n/a)	~ EUR 43 per MWh (n/a)

# Taxation – Finland and Sweden

- Windfall tax removed from the Government agenda in Finland
- Proposed fuel tax increases in Finland apply only to heat production - according to EU legislation fuels for electricity production not to be taxed
  - The increase would likely not materially impact margins in Heat but would potentially lead to higher district heating prices
- Sweden has decided to increase the property tax of hydropower plants to 2.8% as of 2011
  - Additional cost for Power in 2011 EUR ~15 million
- Nuclear capacity taxation is a significant cost driver in Sweden
  - No change in nuclear capacity tax proposed
  - Around 5-7 EUR/MWh assuming normal capacity utilisation

# A strong platform for future

- The market driven production company – growing in Power, #4 in Heat globally
- The fundamental drivers for the European power markets still in place: the need for new capacity, market integration, CO<sub>2</sub> mitigation
- Carbon exposure among the lowest among European power utilities
- Growth in Russia through the investment and efficiency improvement programmes
- Strong financial performance and financial headroom



 **Fortum**