



Capital Markets Day

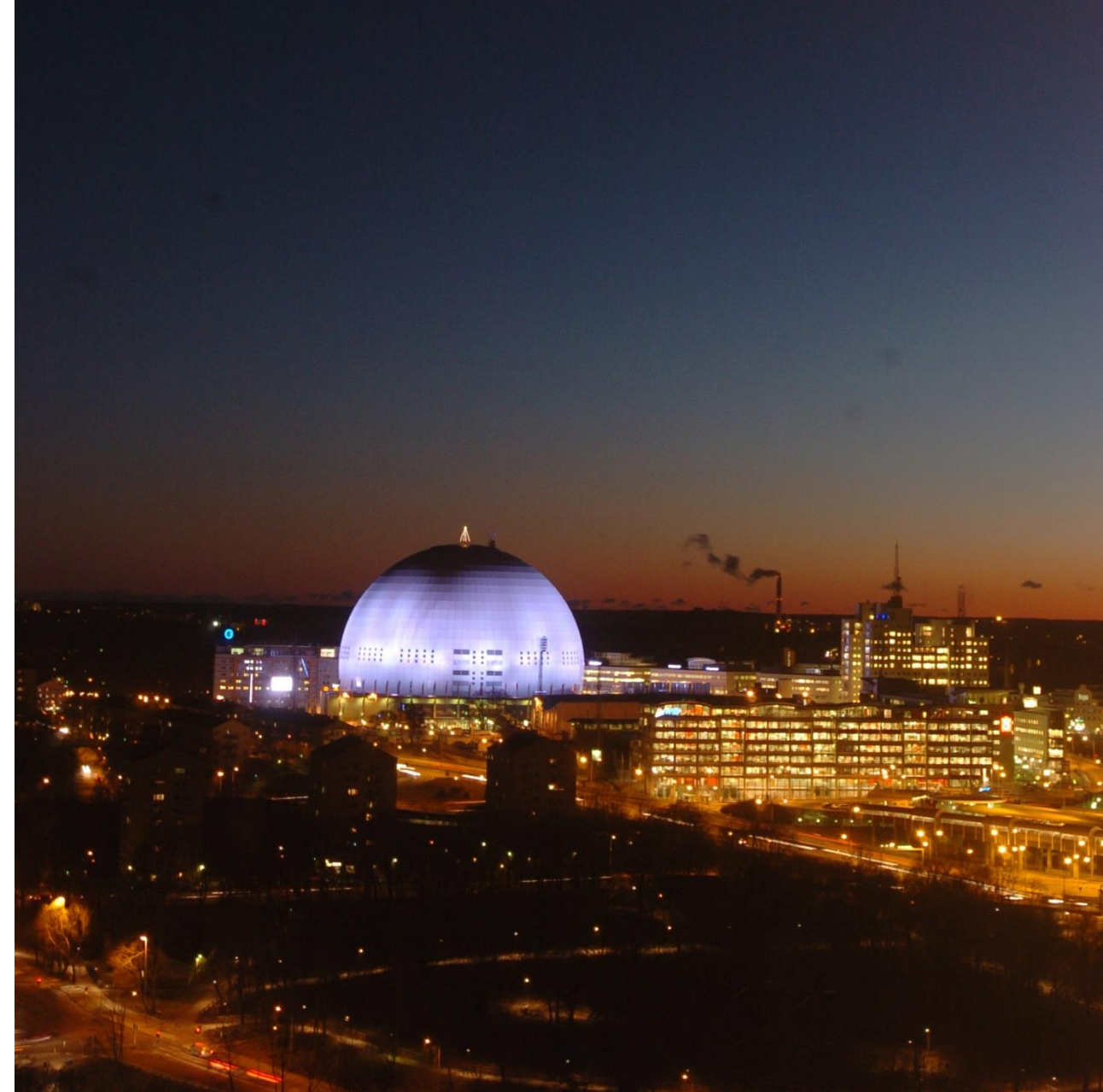
Putting our strategy to work – achievements and priorities

Pekka Lundmark / President and CEO / 16 November 2016

Trängslet hydro power plant, Sweden

Agenda

- Macroeconomic landscape and market environment
 - Changes in the energy system
 - Uncertainties
- Power price development
- Further defining our strategy
 - Priority areas
 - Dialogue with Per Langer
- Summary



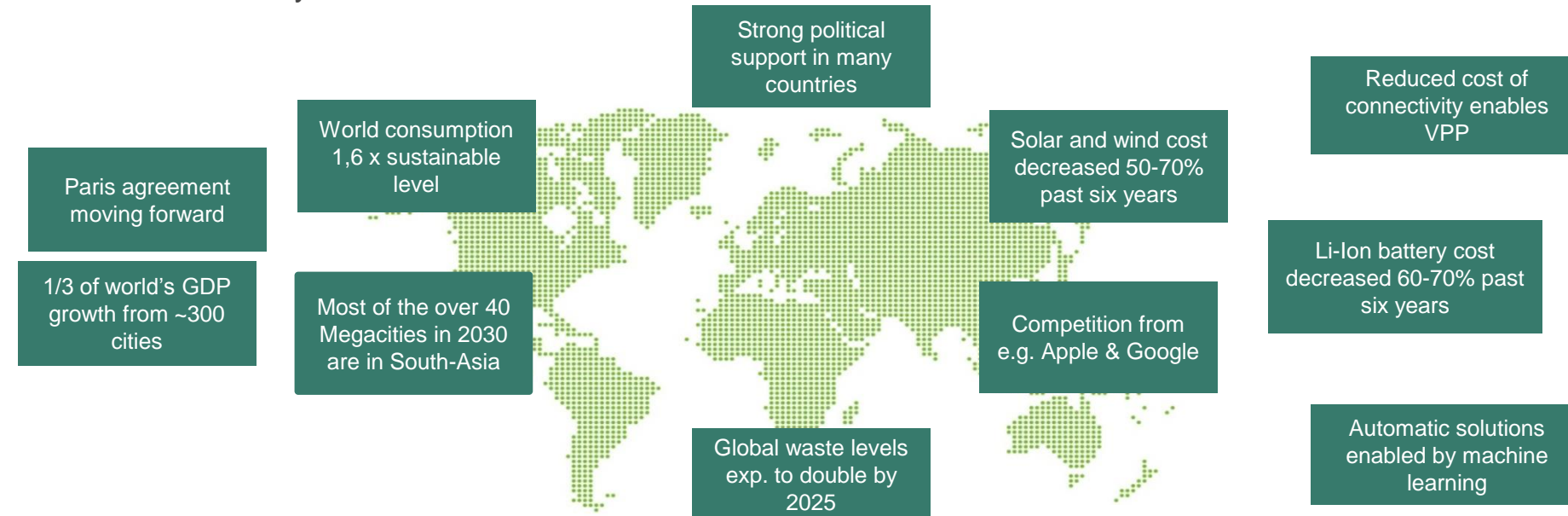
Global megatrends shaping the energy sector

Climate change and resource efficiency

- Decarbonisation
- Renewables
- Circular economy

Digitalisation, new technologies

- Competitive solar and wind
- New digitally-enabled solutions
- Storage



Urbanisation

- Growth of cities – especially in Asia
- Need for sustainable utility services
- Electrification

Active customers

- Customers make conscious choices
- Decentralised production
- Demand response

Megatrends drive fundamental shifts in the energy system

FROM

- Scarcity (value) mainly in energy
- Burning fossil fuels and landfilling waste
- Retail electricity sold to largely passive customers with established supplier relations
- Well-established, tried and tested technologies

TO

- Increasingly scarcity (value) in capacity (security of supply, flexibility)
- Maximising value from local materials/fuels (waste and biomass) through recycling and waste to energy
- Increasingly active and conscious customers, high switching rates and value added from broader services on top of energy
- Continuous, disruptive technological change

Modest GDP and electricity demand growth will continue; other drivers supporting Fortum's vision and strategy

Well-functioning markets and an efficient carbon pricing to innovate and compete on equal terms

A predictable EU regulatory framework for biomass sustainability is needed

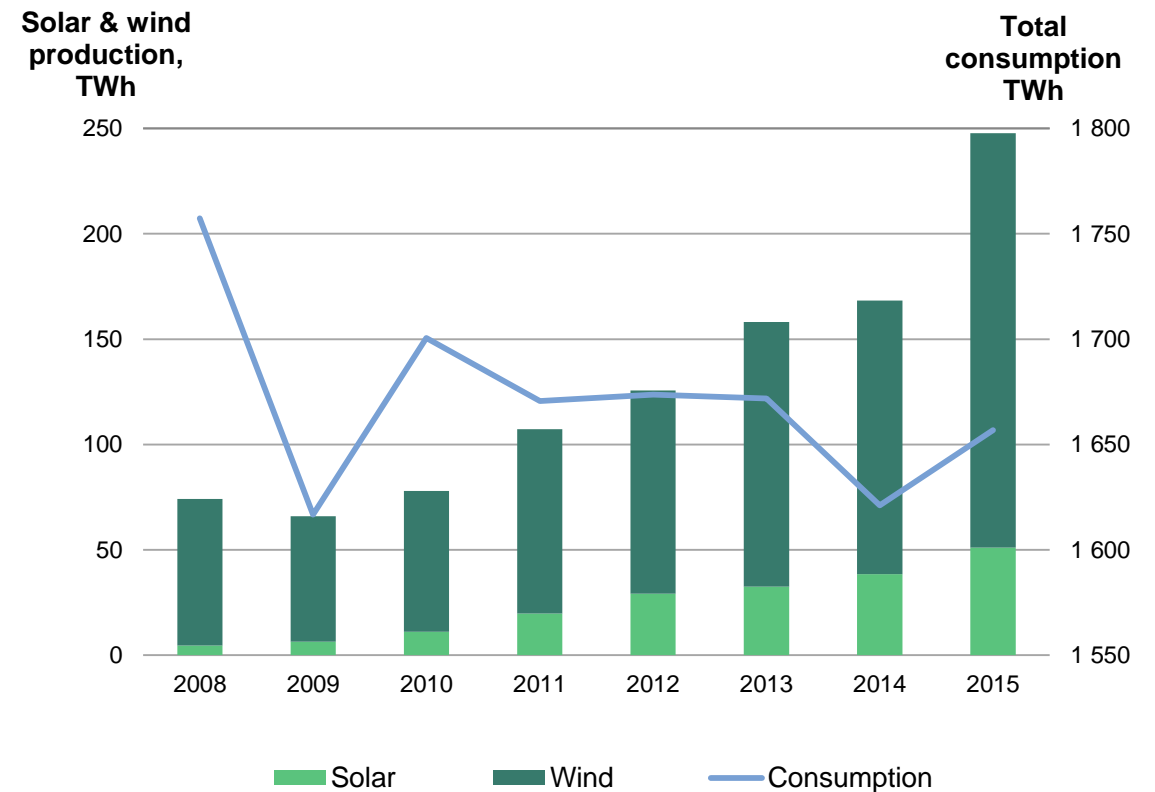
Rapidly falling technology costs allow market-driven investments in RES

Nuclear and coal closures bringing value to RES (incl. hydro) and flexible gas

Well-functioning markets and efficient carbon pricing is a must

- Drive decarbonisation with CO₂ pricing
- Integrate all RES into the market
- Integrated EU electricity markets through regional cooperation
- Develop the after-spot markets
- Enforce link between wholesale and retail markets
- Put more effort on grid development

Evolution of electricity demand and solar and wind generation in Northern Europe



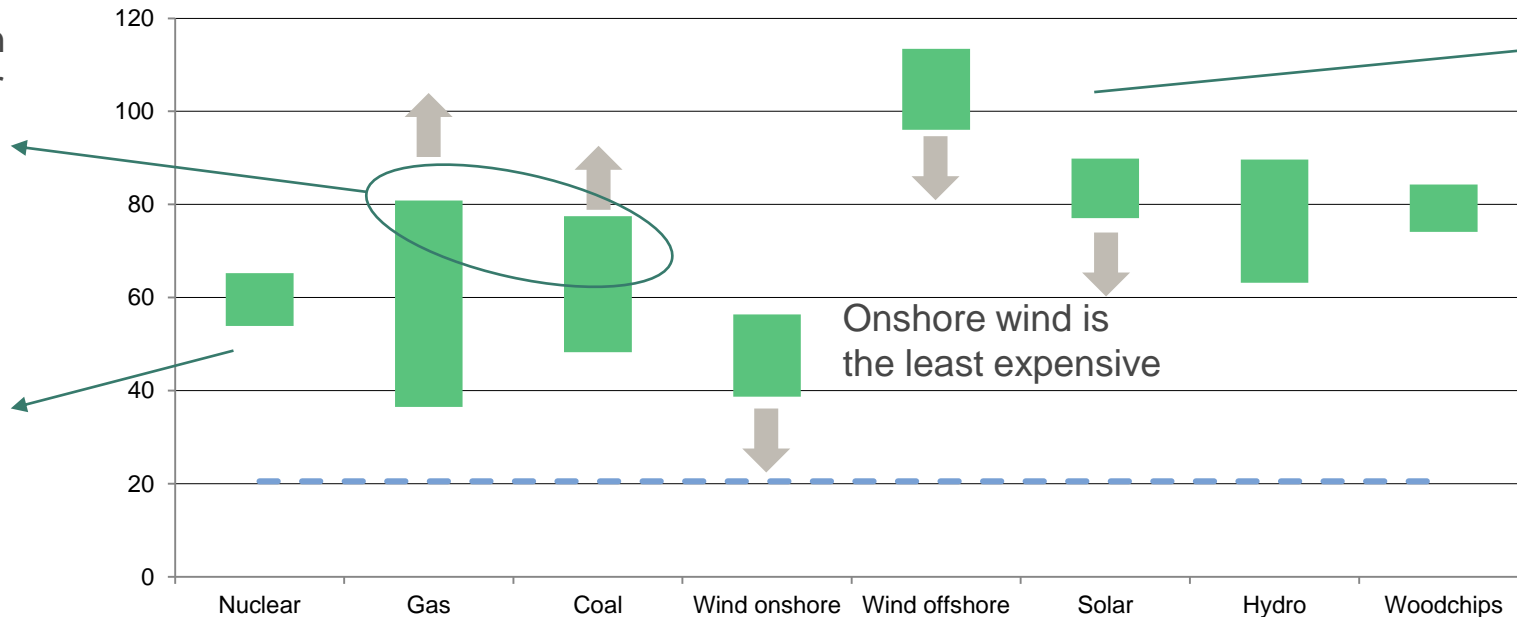
Rapidly falling technology costs allow market-driven investments in RES

Indicative ranges for different production type LCOE's

€/MWh

Upper part with actual load factor in 2015, lower part for base load

Nuclear costs have inflated in the past years due to new safety requirements



Solar is expensive and does not fit well in the Nordic demand profile, but it is very competitive in southern countries

Onshore wind is the least expensive

— LCOE ranges (fuel forwards 12.9.2016)
— Nordic SYS 2020 year futures as of 12.9.2016

Disclaimer: The presented figures do not represent Fortum's own view on the levelised costs of electricity



Opportunities and uncertainties impacting the power price development

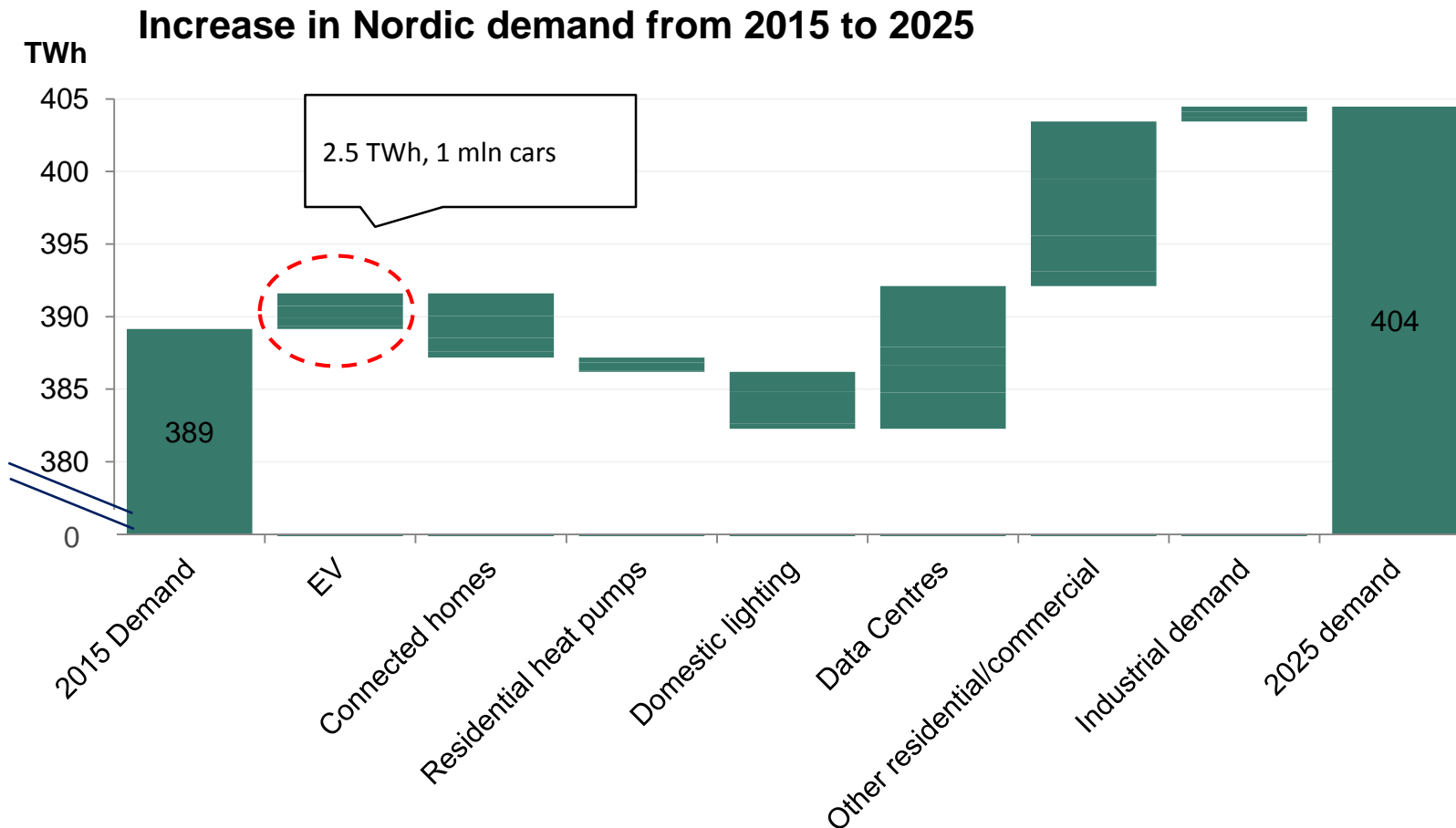
Factors leading to higher prices

- **CO₂ price**
- Increase in the prices of **gas and coal**
- Increasing **cross border connections** and strengthening grid in Continental Europe
- **Supply demand balance tightening** (nuclear and coal closures and rising demand)

Factors leading to lower prices

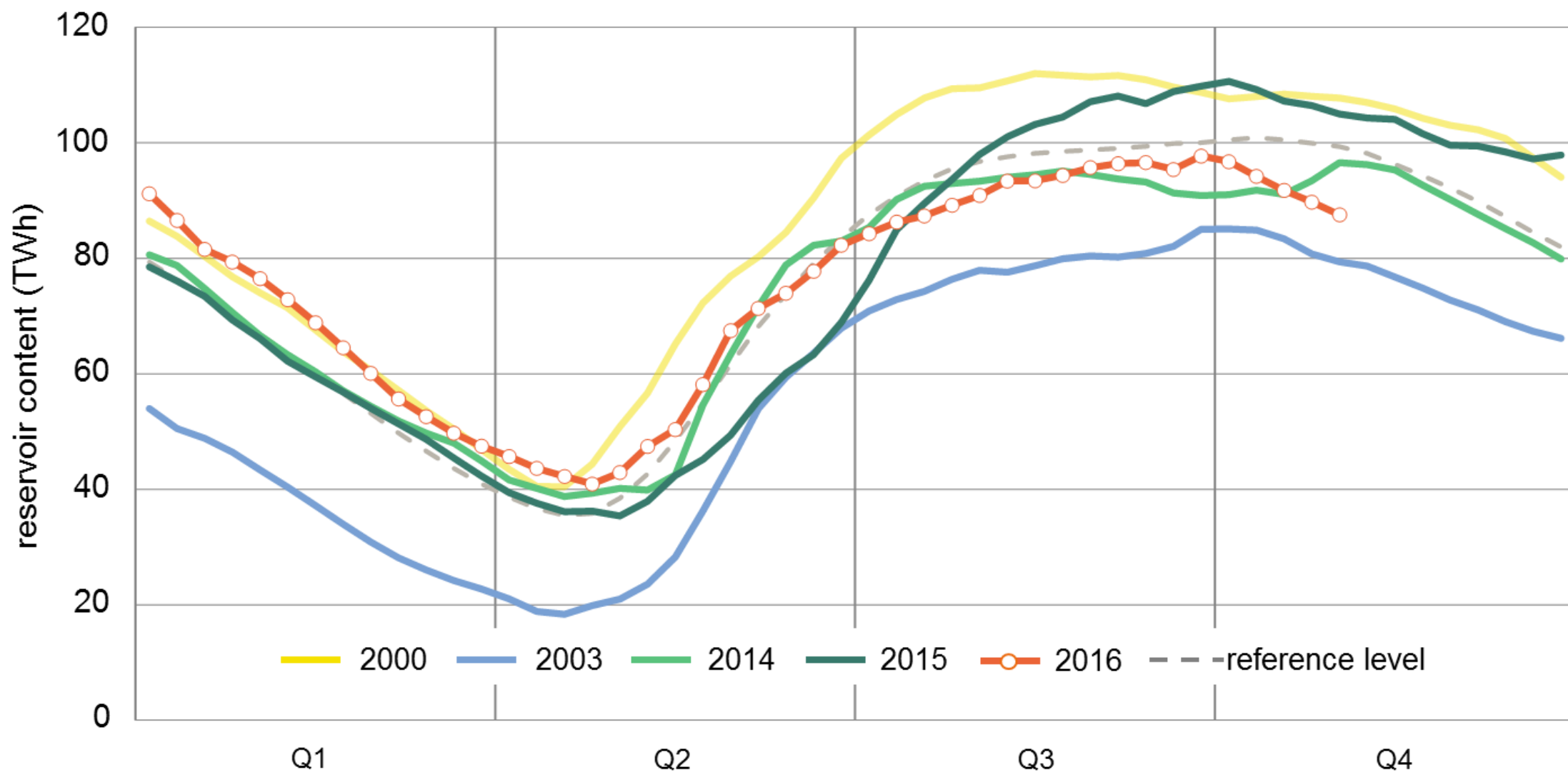
- **National climate and energy policies**
- Low demand for **fossil fuels**
- **Energy efficiency** regulation dampening demand
- **New investments remunerated** outside the market (subsidies, capacity market)
- **Technological innovations** reducing electricity cost and driving market development

Nordic power demand driven by digitalisation and EVs



Sources: Fortum, Finnish Energy, Swedenergy, Norwegian Water Resources and Energy Directorate, Danish Energy Association

Nordic water reservoirs

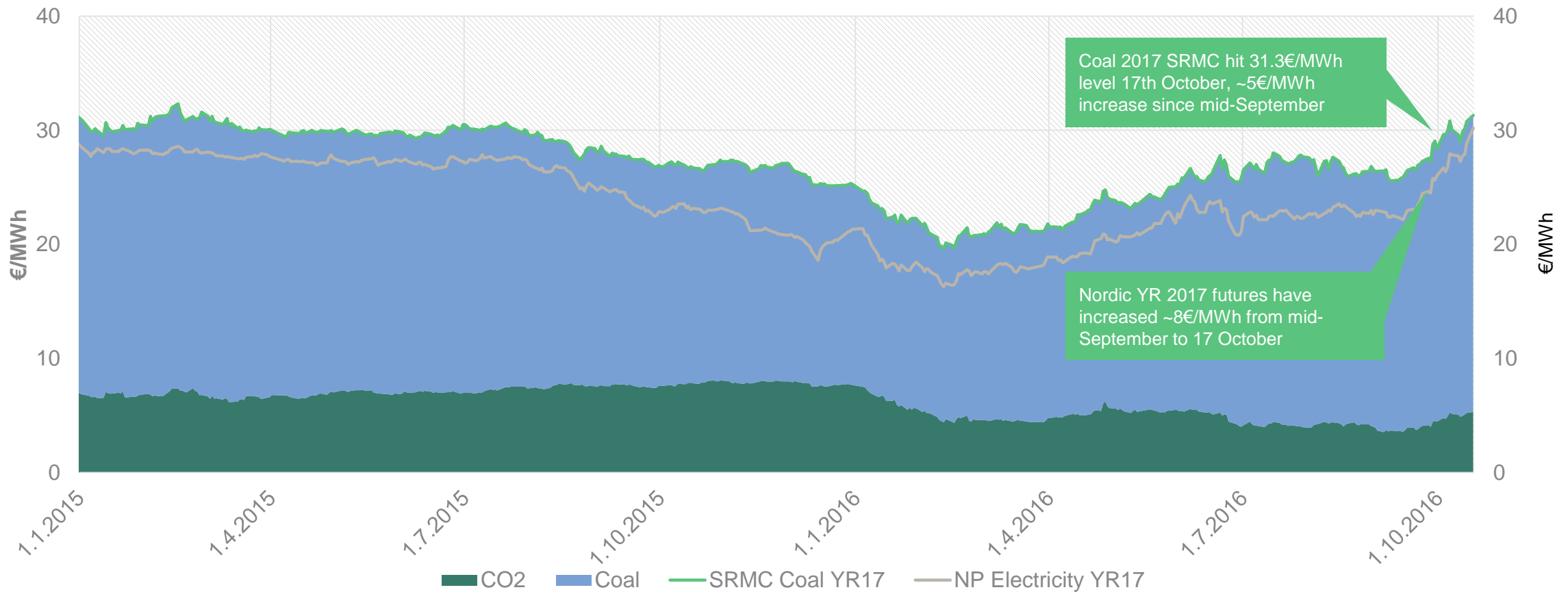


Source: Nord Pool

Nordpool has been following coal SRMC and German market

Lately coal SRMC and French nuclear unavailability have been drivers for EEX and Nordic futures

NP SYS YR-17 forward and Coal SRMC by component



China's tight coal balance behind current high coal prices

EUA price has been improving with overall energy commodity strength

Coal

- China is targeting to close 500Mt capacity in next 3-5 years and to re-consolidate another 500Mt to balance domestic coal market
- Tight Pacific coal market due to increased Chinese imports is the main reason for current seaborne coal price strength
- China has recently signaled loosening the policy measures to restrict the heavy price increase

EUA

- EUA price dropped from €6 to below €4/t after Brexit vote but has recovered lately back to €5.5...6 level
- Overall strength of energy commodities, especially gas price, is in our view the driver of the recent EUA recovery

Oil

- OPEC announced they are ready to come to an agreement to reduce oil output at next meeting in November from current 33.2 Mbd to 32.5-33 Mbd. The deal supported prices but as Libya, Iran and Nigeria are exempted from the deal it means supply can still increase in the near-term and the global rebalancing is not likely to occur until H2 2017

European (ARA) and South Chinese 1st Month coal futures

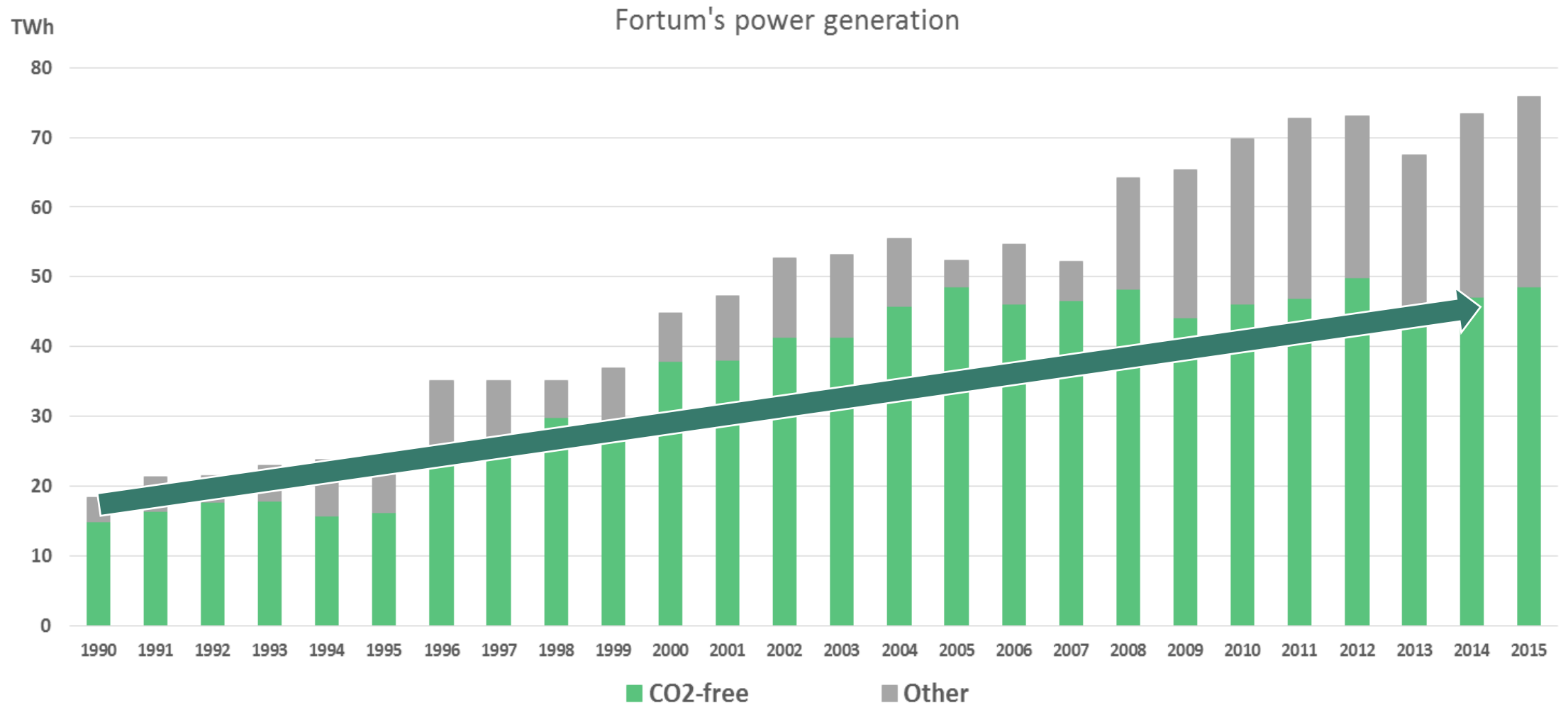


A decorative graphic in the top-left corner consisting of four small squares: a large green one, a medium blue one, a small orange one, and a small yellow one.

Further defining our strategy

Blaiken wind farm, Sweden

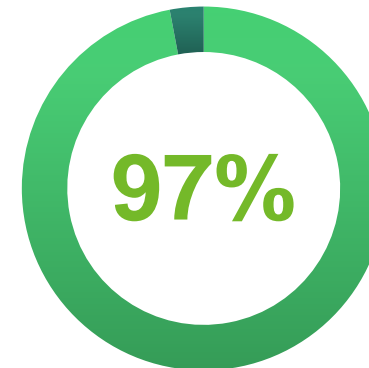
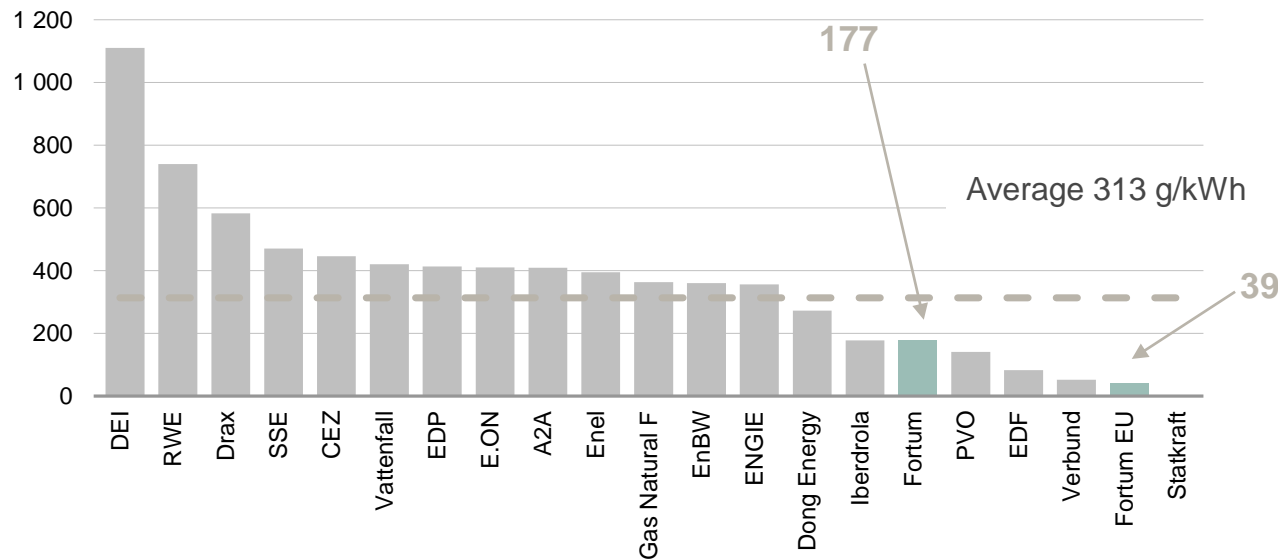
Climate change and CO₂ reduction is in Fortum's DNA



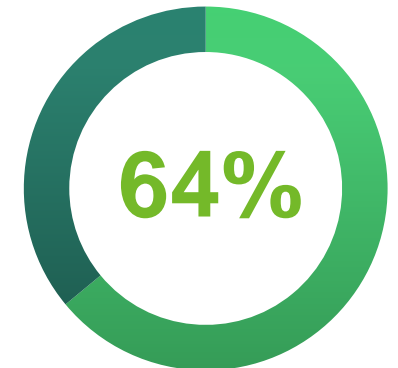
Fortum's carbon exposure is among the lowest in Europe

Fortum's specific emissions of the power generation in the EU in 2015 were 21 g/kWh and in total 166 g/kWh

g CO₂/kWh electricity, 2014



97% of Fortum's power generation in the EU CO₂-free



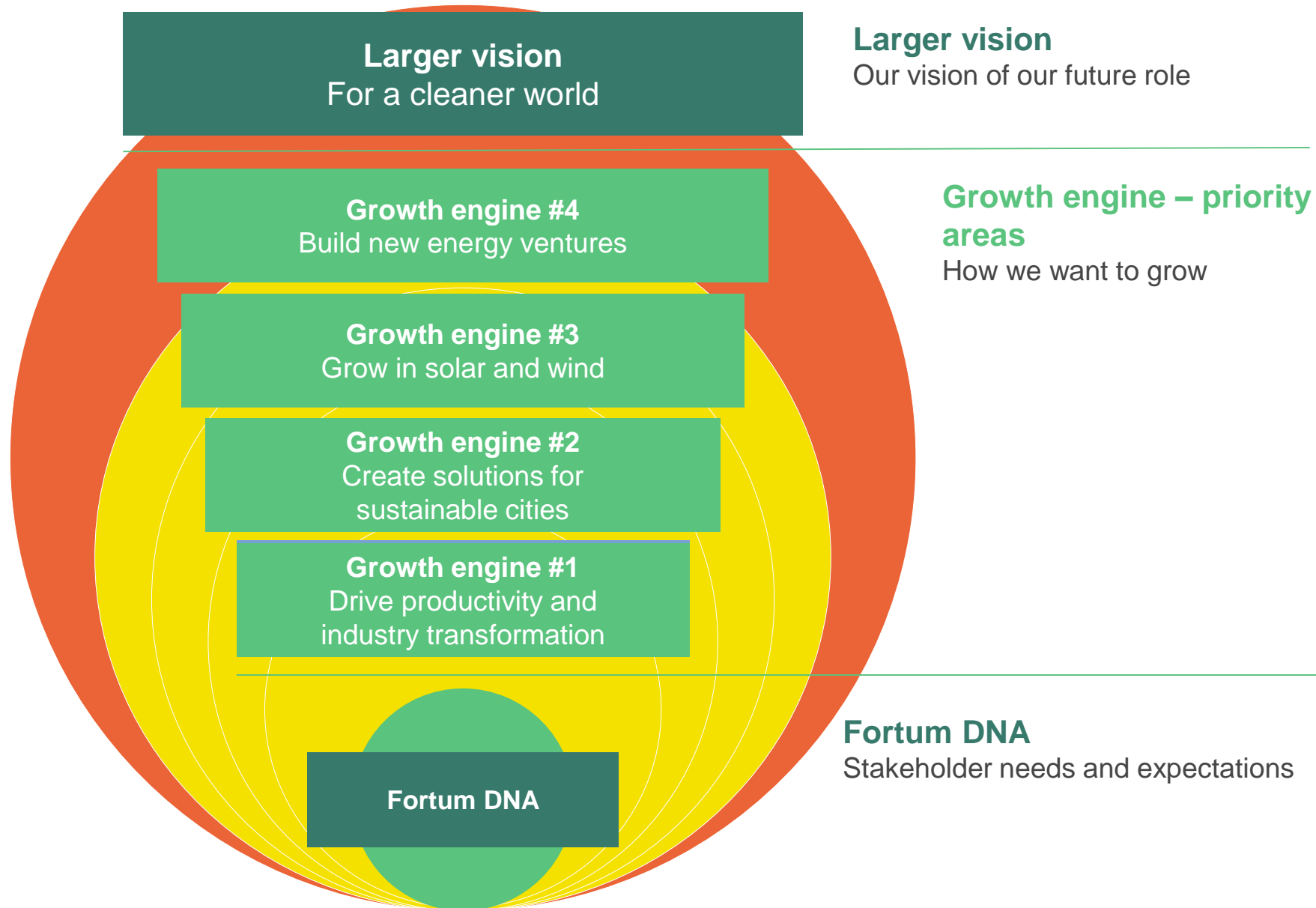
64% of Fortum's total power generation CO₂-free

Figures: 2015



”Strategy and financial targets to drive capital redeployment in order to ensure fair remuneration”

Loviisa nuclear power plant, Finland



Significant part of the redeployment is targeted to take place in 2016-2017

Phase 1

Maximising cash flow through acquisitions

1. Generation consolidation in Europe
2. Widening the City Solutions scope
 - Mostly in Europe
 - Circular economy, biomass and waste
 - CHP, heating and cooling

1.
> EUR billion scale
At least one sizeable

2.
~EUR billion scale

Phase 2

Positioning for the future

3. Acquire and construct wind close to current assets in Nordpool area and Russia
3. Build solar
 - India; followed by system integration solutions
4. Acquire, invest in start-ups and funds focused on technologies with disruptive potential

3.
~EUR billion scale
of which India
EUR 200-400 million

4.
EUR 100 – 200 million

Actual capex split to businesses will depend on cases/opportunities available, and adjusted with view on market development – therefore allocation highly indicative

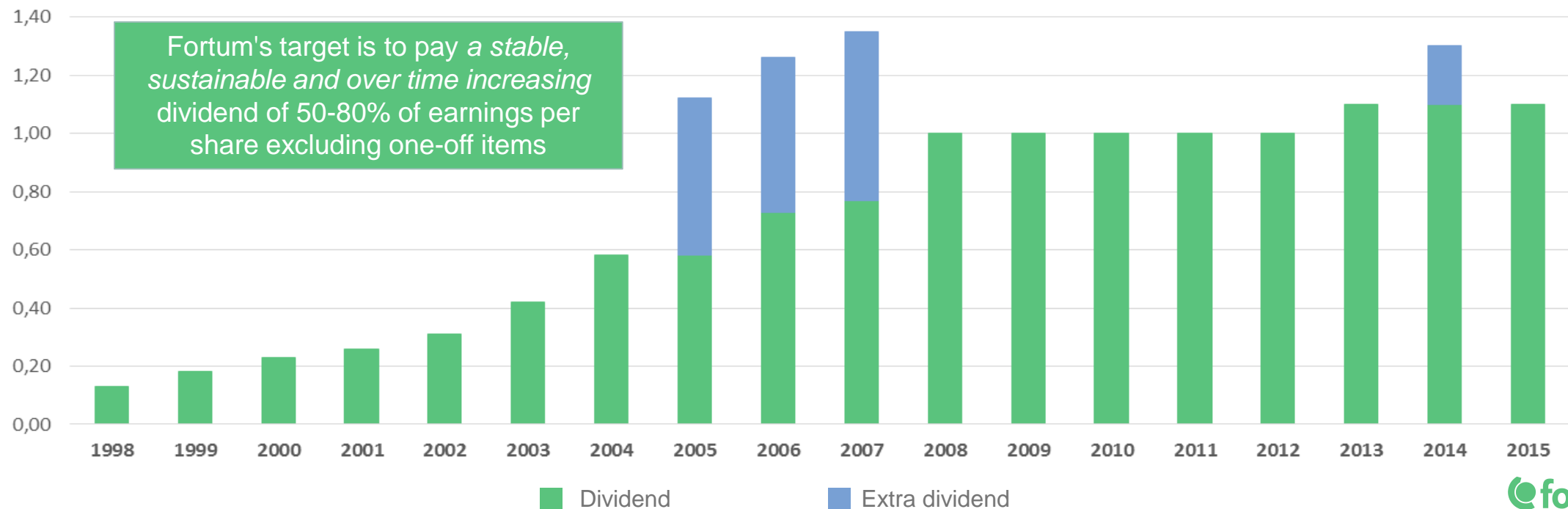
Our dividend policy

Fortum's dividend policy is based on the following preconditions:

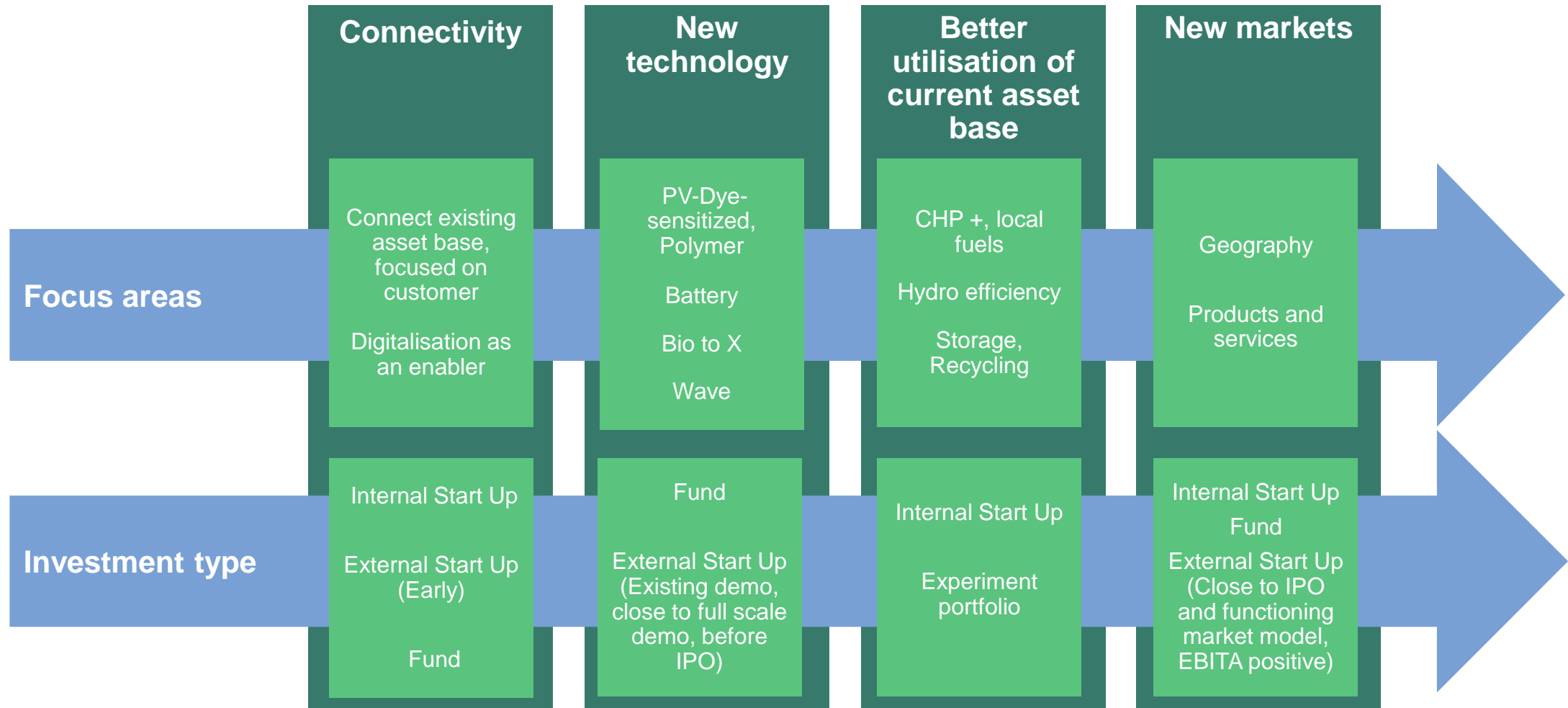
The dividend policy ensures that shareholders receive a fair remuneration for their entrusted capital, supported by the company's long-term strategy that aims at increasing earnings per share and thereby the dividend.

When proposing the dividend, the Board of Directors looks at a range of factors, including the macro environment, balance sheet strength as well as future investment plans.

Dividend per share (EUR)



New Ventures: Investment of EUR 100-200 million



Building digital capabilities

- New business models in connected world
- Wider view than Nordics
- Customer seen in a new way

Business development



Technology awareness



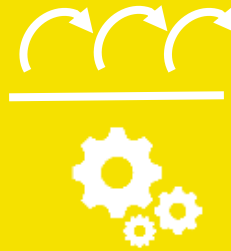
- Technology scouting
- Building ecosystems for digitalisation
- Accelerating selected technology areas
- Sharing information

- Data driven understanding of power plants, business and customers
- Sophisticated data analysis methods

Data science



Agile projects



- Mixed project teams (combine users with developers)
- Fast test/pilot/poc
- Allow failures
- Commercialisation

Summary

Vision

**For a
cleaner world**



Megatrends

Climate change and resource efficiency
Urbanisation
Active customers
Digitalisation, new technologies

Mission

We engage our customers and society to drive the change towards a cleaner world. Our role is to accelerate this change by reshaping the energy system, improving resource efficiency and providing smart solutions. This way we deliver excellent shareholder value.

Strategy



Drive productivity and
industry transformation



Grow in solar and wind



Create solutions for
sustainable cities



Build new energy ventures



For more information, please visit
www.fortum.com/investors