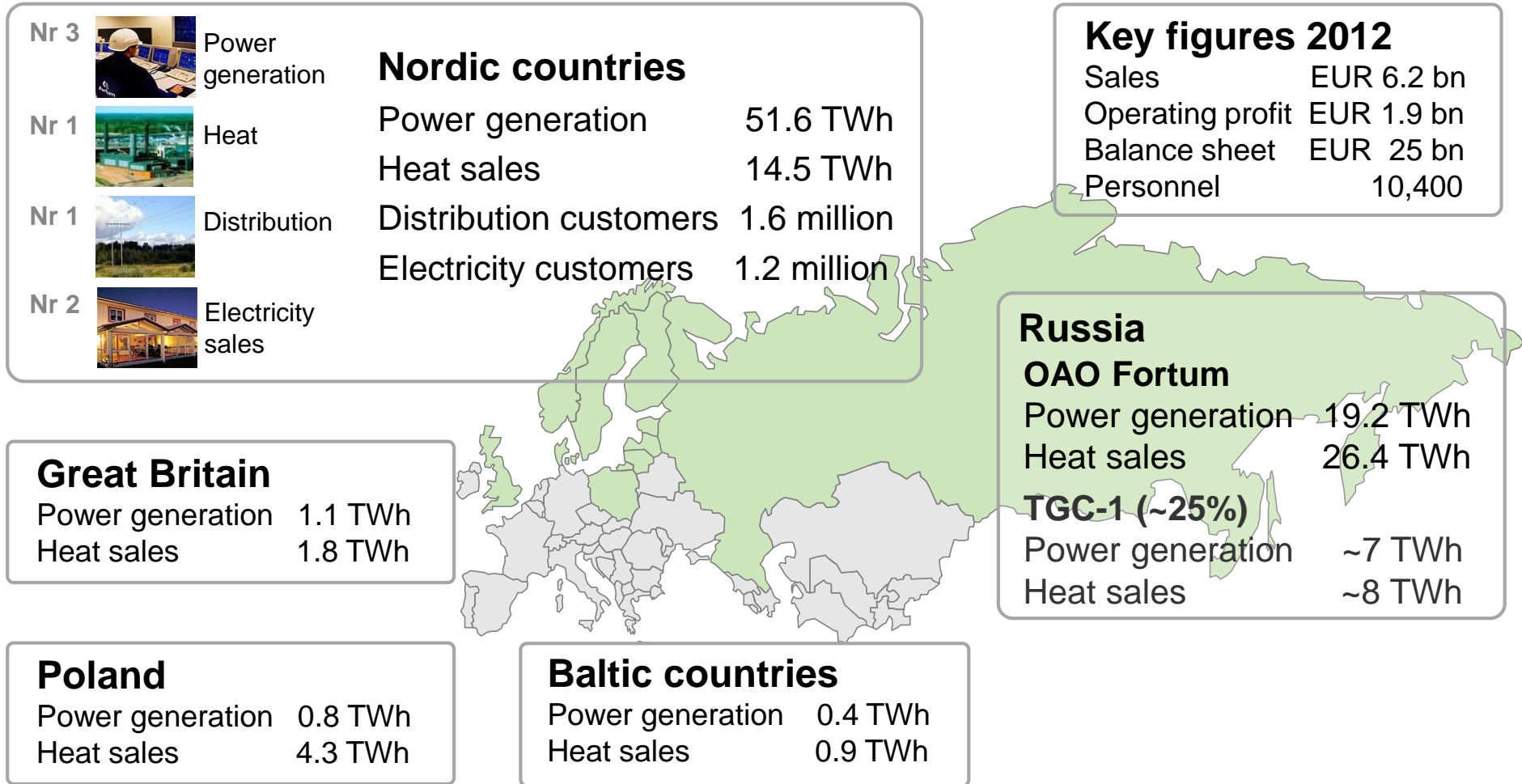


Fortum – Power and heat
company in the Nordic countries,
Russia, Poland and the Baltics

Birgitta Resvik, Vice President Corporate Relations Sweden

Our geographical presence today

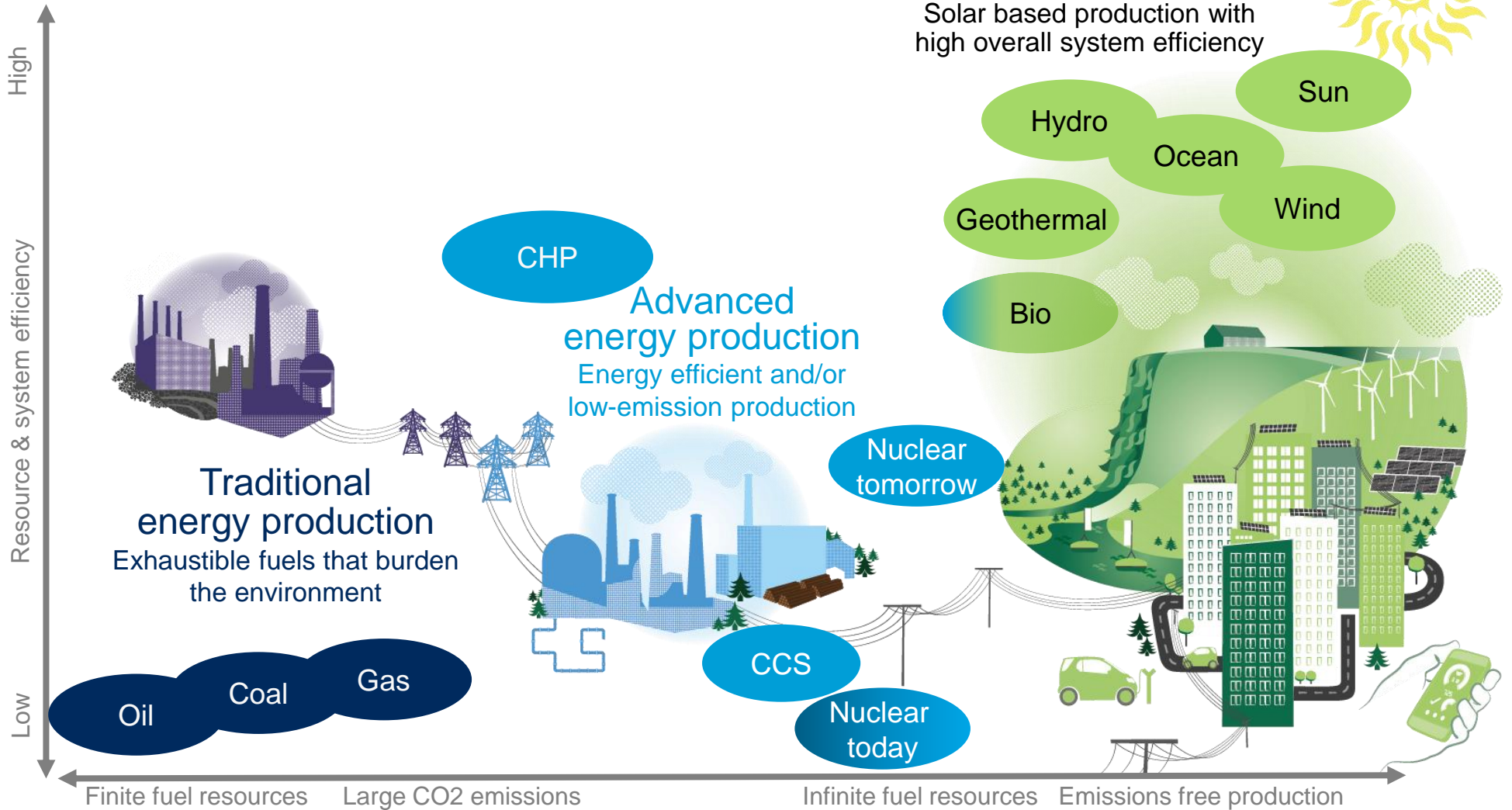


Transition towards Solar Economy

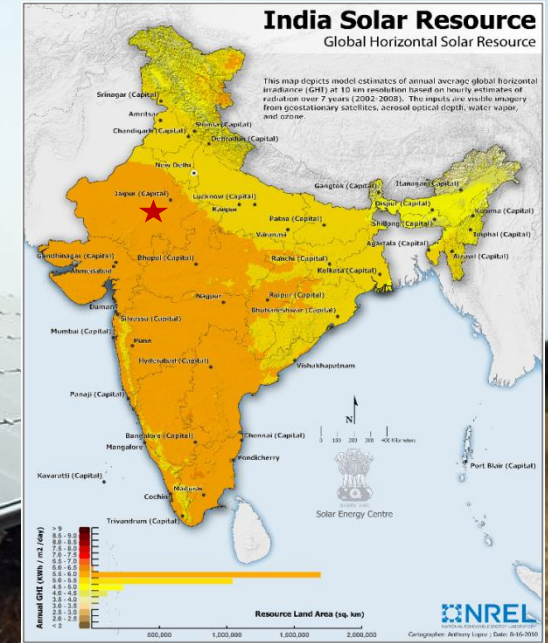
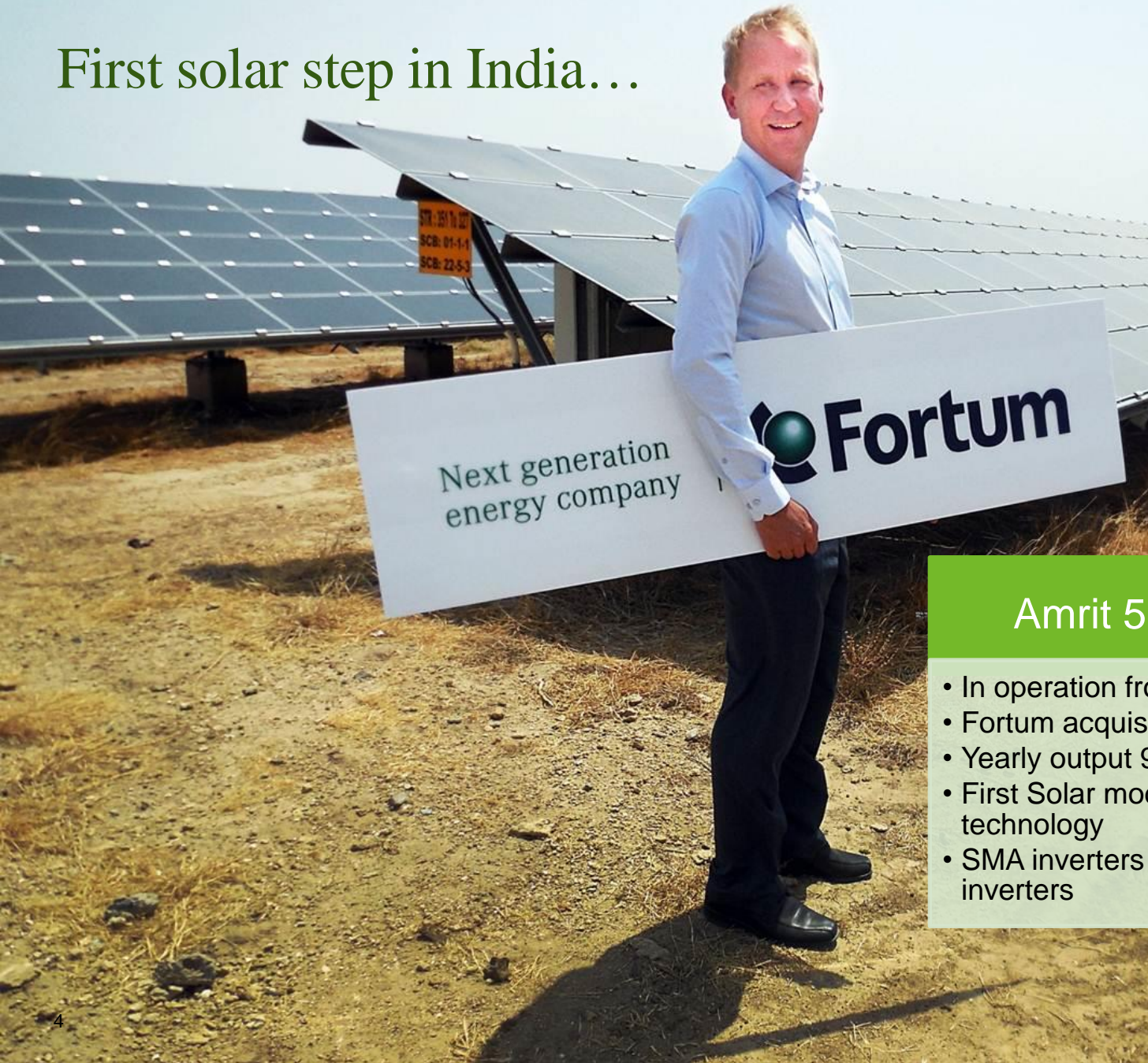
Solar Economy



Solar based production with high overall system efficiency



First solar step in India...



Amrit 5.4 MWp solar plant

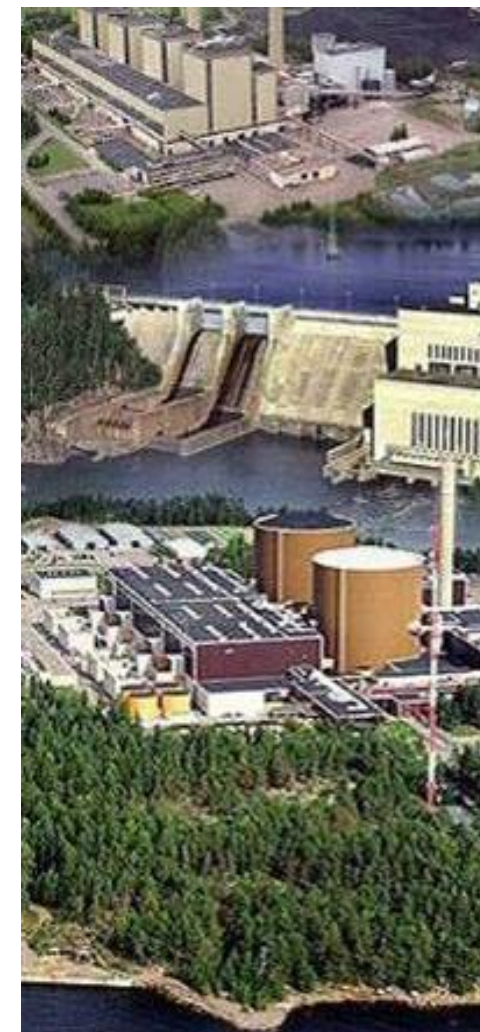
- In operation from March 2012
- Fortum acquisition finished in June 2013
- Yearly output 9,200 MWh (~1,700kWh/kWp)
- First Solar modules - leading thin film module technology
- SMA inverters - market leader in solar inverters

Fortum's investment programme

– Nordic region, Poland and Baltic countries

Project	Electricity, MW	Heat, MW	Commissioned
Olkiluoto 3, Finland	400		
Swedish nuclear upgrades	290		
Blaiken, Sweden, wind power	30		
Refurbishing of hydro power	10		annually
Brista, Sweden <i>(waste CHP)</i>	20	57	Q4 2013
Klaipeda, Lithuania <i>(waste CHP)</i>	20	60	Q1 2013
Järvenpää, Finland <i>(biomass CHP)</i>	23	63	Q2 2013
Jelgava, Latvia <i>(biomass CHP)</i>	23	45	Q3 2013
Värtan, Sweden <i>(biomass CHP)</i>	130	280	2016
Total	~950	~500	

Additional electricity capacity around 950 MW
100% CO₂-free



Example of wave power projects

Fortum is co-owner in AW Energy Oy, developing WaveRoller

- Technology from the waves on the bottom of the sea, close to the shore,
- A pilot plant outside Portugal,
- A new 1,5 MW project outside Bretagne together with DCNS announced yesterday.

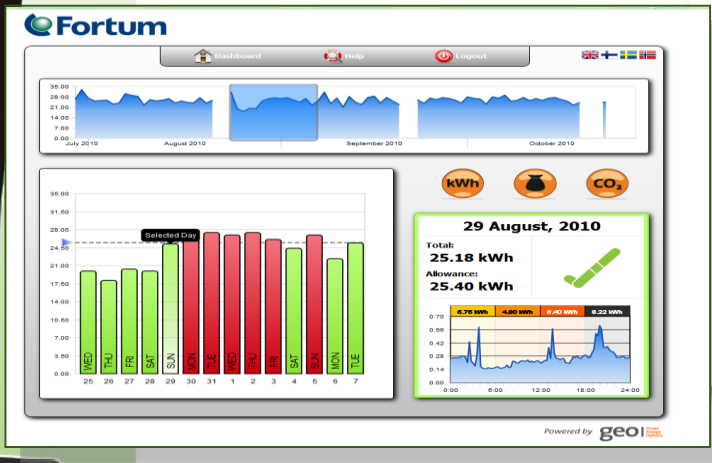


Fortum invest in world largest wave power plant on the west coast of Sweden

- Electricity from the wave
- Power generation of 10 MW with about 420 units. Planned start of production year 2014.
- The Swedish Energy Agency and Fortum support the project with about 50 percent each - totally 250 MSEK



Fortum helps the consumer to be more active and aware



Ta kontroll över din elräkning!

Adaption is already here for the energy sector



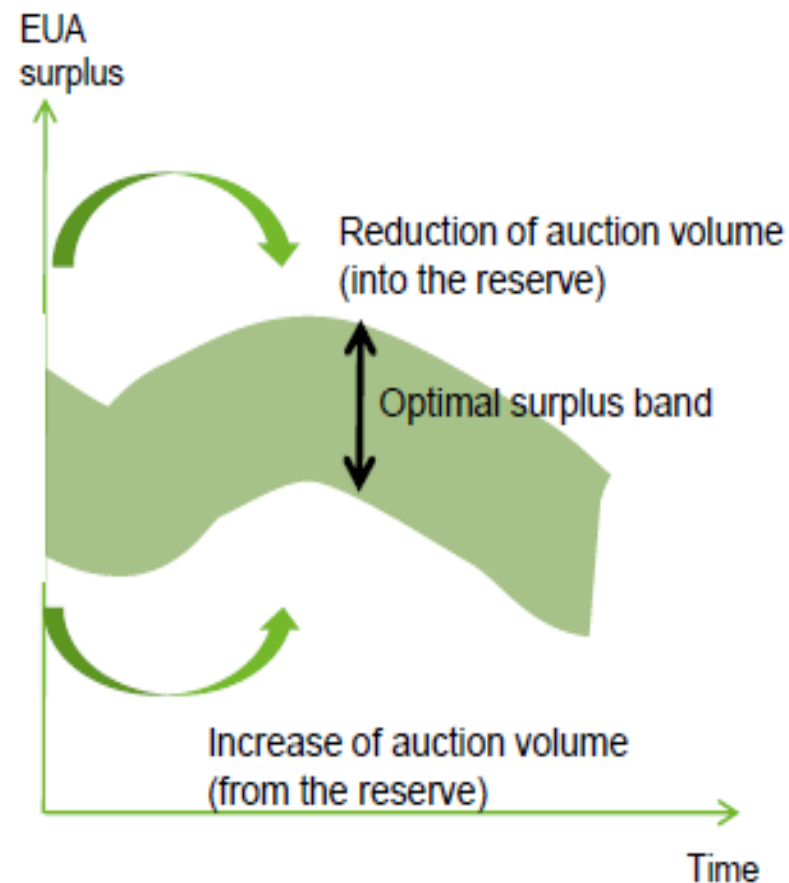
Damm safety - a continuous work

- New criteria set by the sector; 10-thousand years flow - earlier 500 years,
- Fortum reconstruct and invest the coming years about 4 billion SEK in damm safety.

Upgrading the electricity network

Build on the system we have - strengthening the EU-ETS

- In long term (2020 ->):
 - Set the emission target for 2030 quickly,
 - No need of separate targets for mature technology of RES,
 - R&D support for new technology,
 - Enlarging the scope of ETS preferred.
- Structural changes in ETS is needed.
 - A pre-designed mechanism to adjust the ETS automatically in cases of significant deviations in economy.
 - An automatic supply adjustment mechanism, ASAM - the thresholds set by e.g. Commission, ECB or another body.
- EU-ETS is the embryo for global trading - many ETS-systems are now coming around the world



Fortum a forerunner in sustainability

- **Dow Jones Sustainability World Index**
 - Included for ten consecutive years
 - Fortum the only Nordic power and heat company
- **Carbon Disclosure Leadership Index**
 - Fortum globally third best company in the utility sector 2012
 - Fortum the only Nordic power and heat company
- **SAM Sustainability Yearbook**
- **STOXX® Global ESG Leaders indices**
- **oekom**
- **OMX GES Sustainability Finland Index**
- **Storebrand SRI**



CARBON DISCLOSURE PROJECT



Thank you!

