



# The organisation of energy markets and nuclear opportunities

**Jozsef BAJSZ**

**Chairman, WG Nuclear  
EURELECTRIC**

**European Nuclear Conference**

**12 December 2012, Manchester**





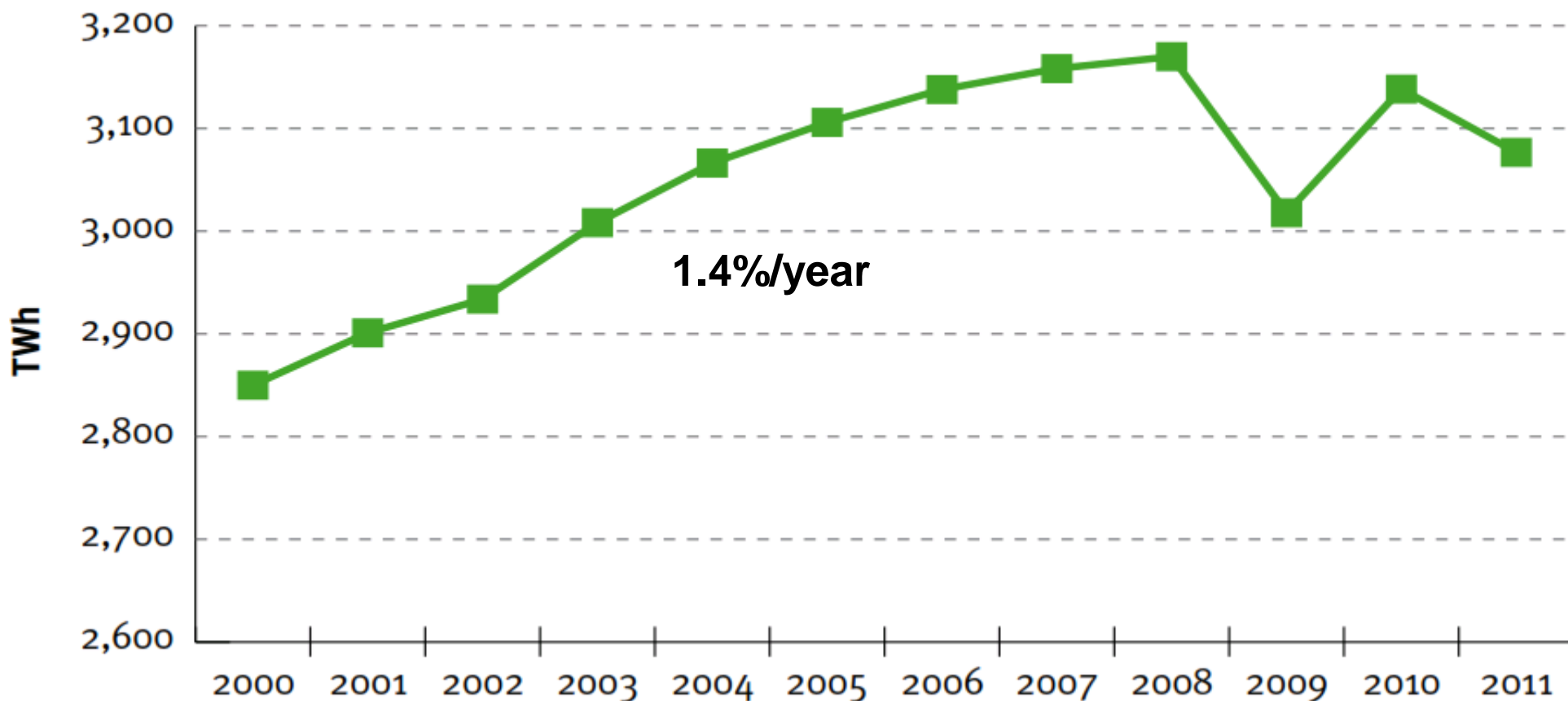
## Europe's energy markets: a tale of complexity

- **Internal Energy Market to be completed by 2014**
  - Emphasis on the day-ahead coupling target model
  - Grids to be further expanded and modernised through EU-wide network planning and operation
  - Generation and networks investments need to be reconciled – or getting past of the ‘mental unbundling’ that unbundling rules have created
- **Renewable policy adds further uncertainty**
  - Variability challenge
  - Financing challenge
- **Policy landscape doesn't reassure investors**
  - Regulatory risk is on the rise
- **“It's the economy, stupid!”**
  - The Great Recession is still biting on the EU energy sector



# Electricity demand on the roller coaster

EU-27 Electricity Demand



Source: EURELECTRIC, Power Statistics 2012

W-shaped GDP

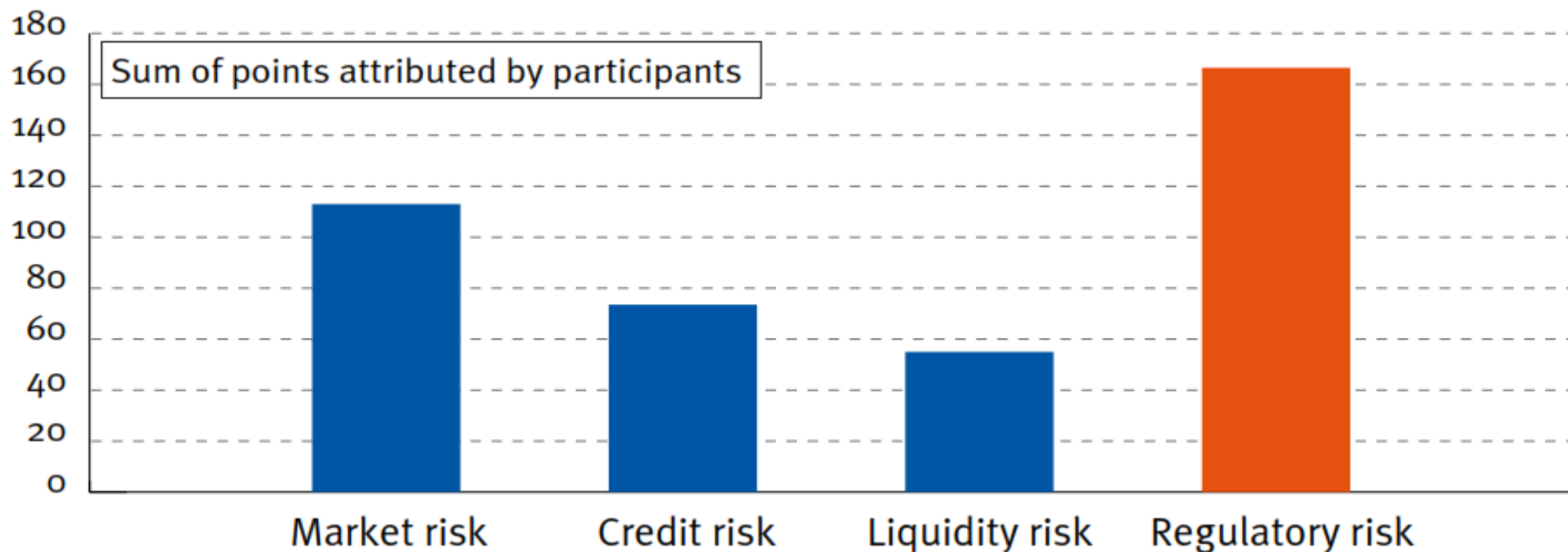


W-shaped electricity demand



## Regulatory risk is on the rise

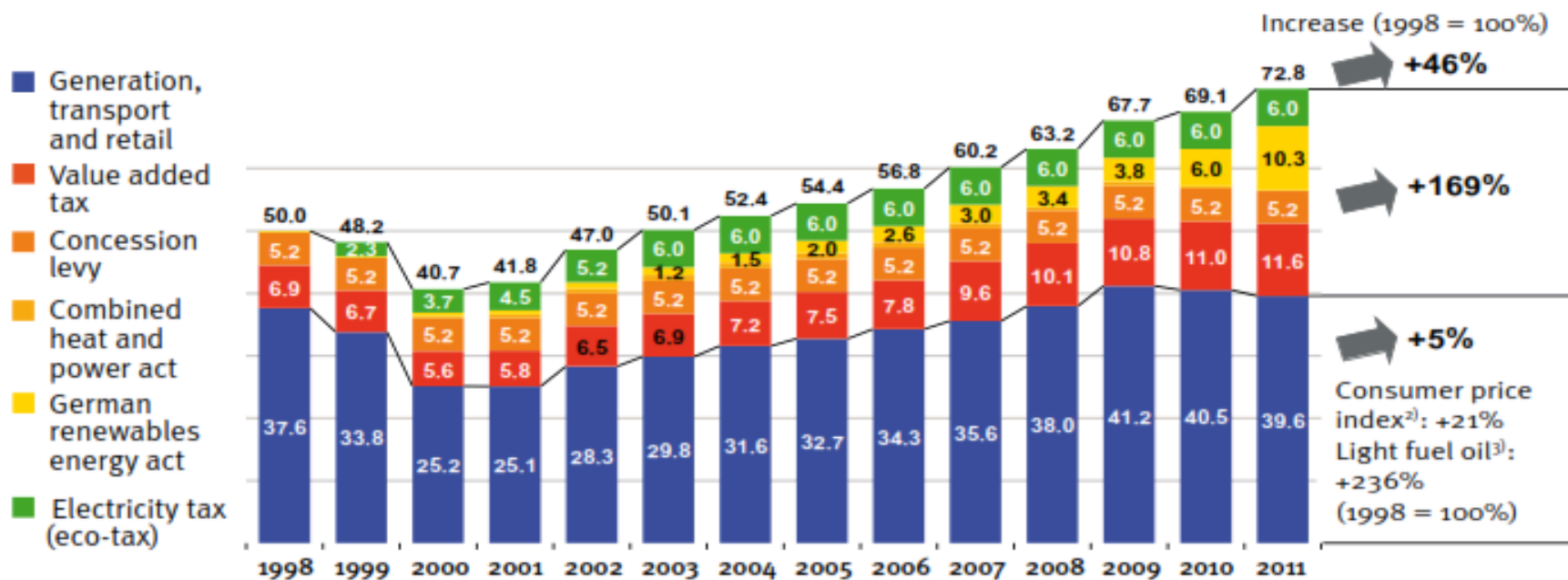
Which risk do you rank highest when making your investment decisions?



How can utilities hedge regulatory risks?



## Taxes and levies are piling up...!



Source: BDEW

### Recent tax developments in Europe in the electricity sector

Spain – new taxes on generation introduced: 6% levy on all forms of power generation + “green cent” levy on fuels (coal, natural gas, fuel oil)

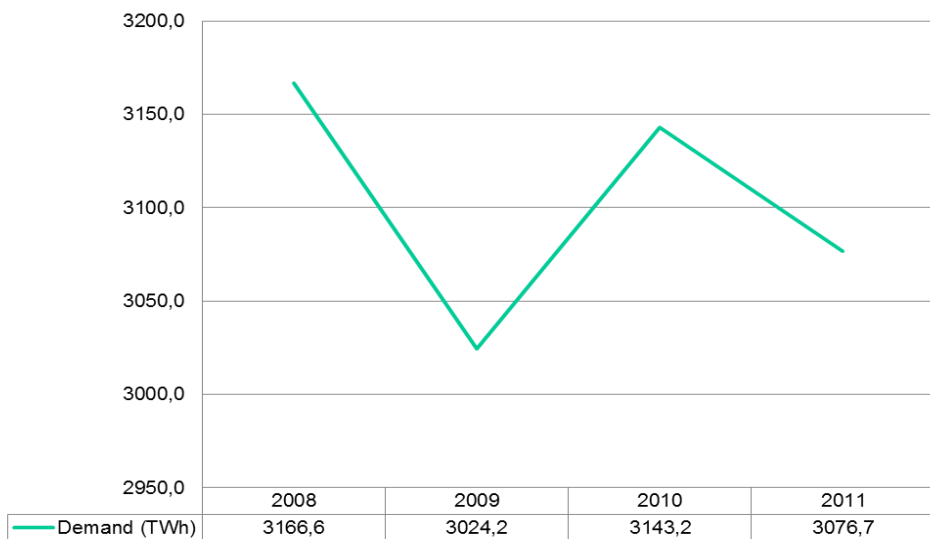
Hungary – “Robin Hood” tax increased by 23 p.p., boosting corporate tax rate to 50%

Netherlands – coal tax of about €14/tonne

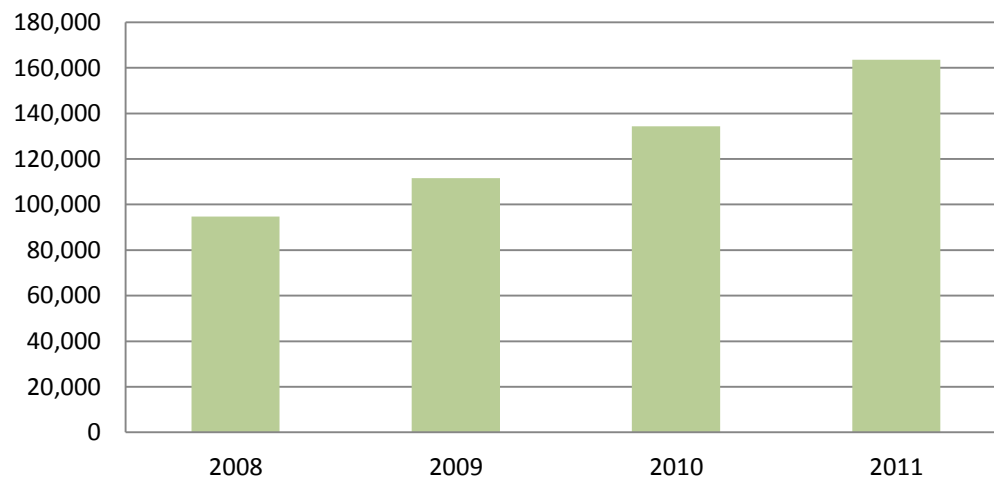


# Renewables – mainly subsidised – keep growing in times of recession

Electricity demand (TWh)



RES installed capacity (MW)



Source: EURELECTRIC, Power Statistics 2012

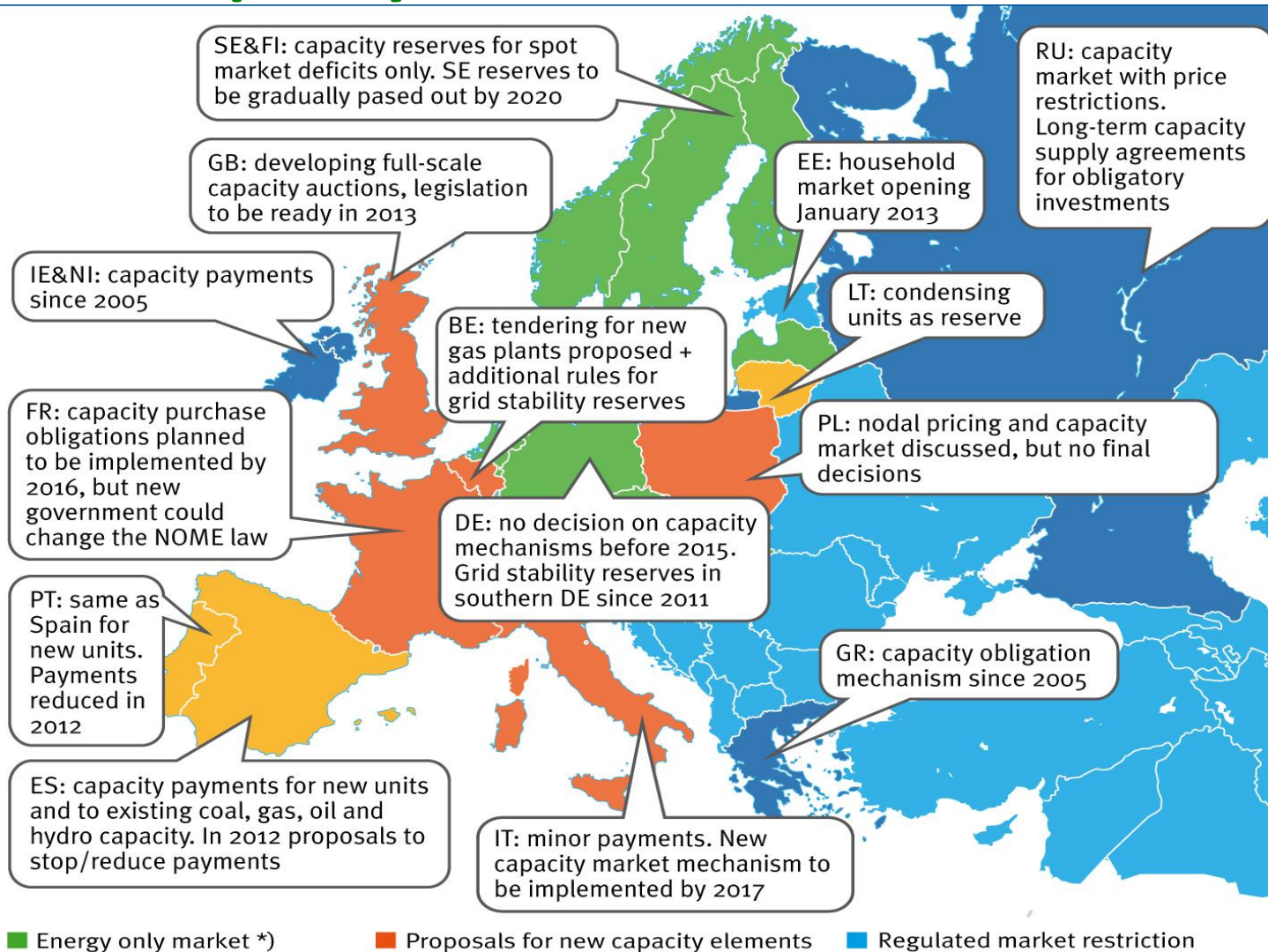
RES capacity increased steadily



Subsidised RES developed irresponsive of market conditions (and more specifically of demand)



# The capacity mechanisms fair in the EU





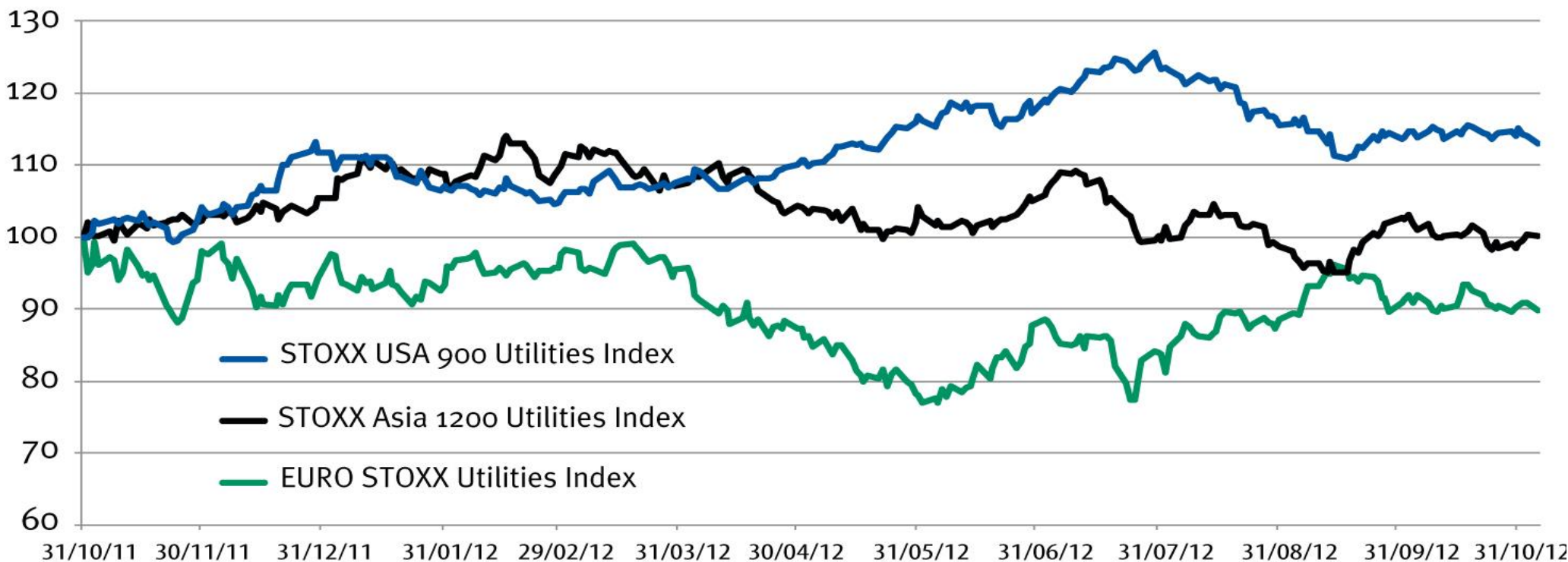
## Results? Utilities challenged: underperforming the European Blue-chip index...





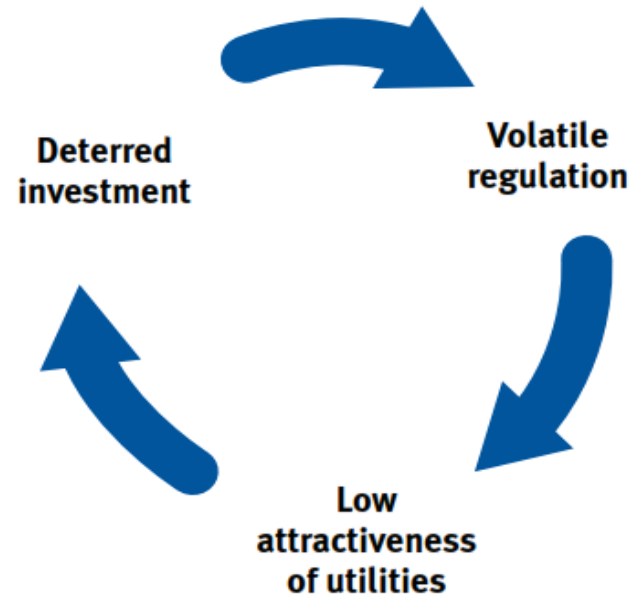


## ... and losing attractiveness vis-à-vis US and Asian peers





## The result: A vicious circle is at work

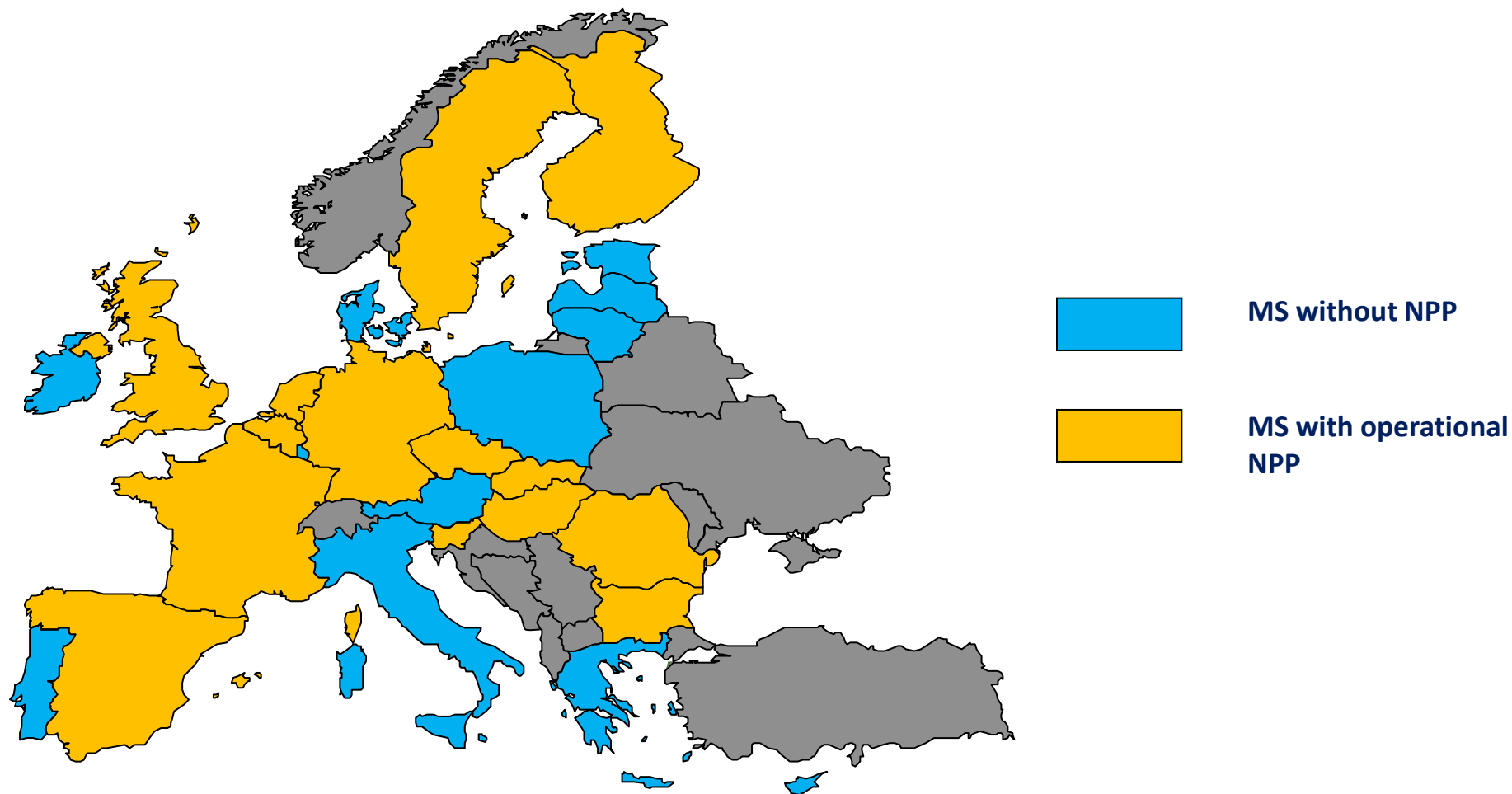


Today's business case for investments is influenced more by political and regulatory decisions than by customer demand

**What does this imply for nuclear energy?**

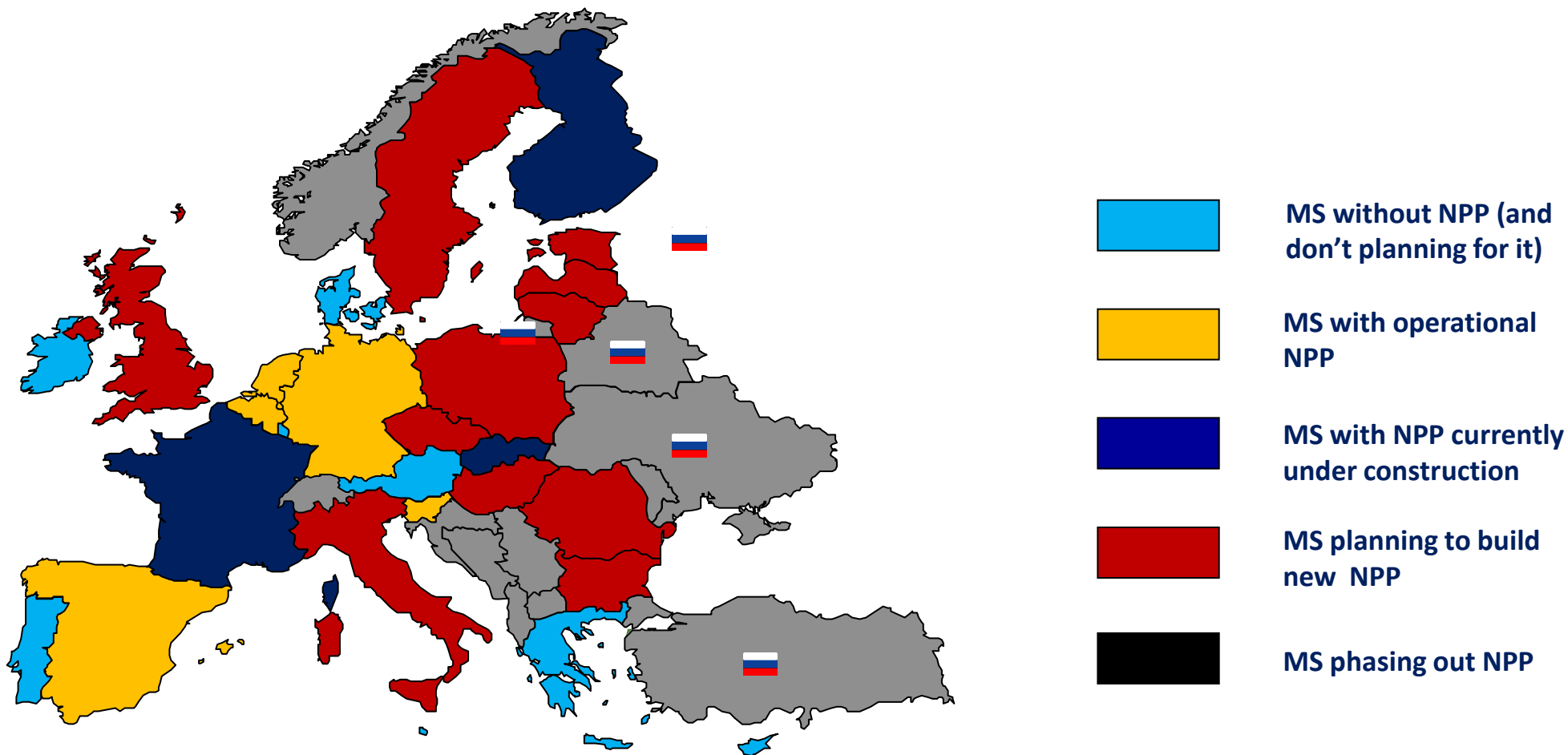


# Policy / regulatory risk is even higher for nuclear generators



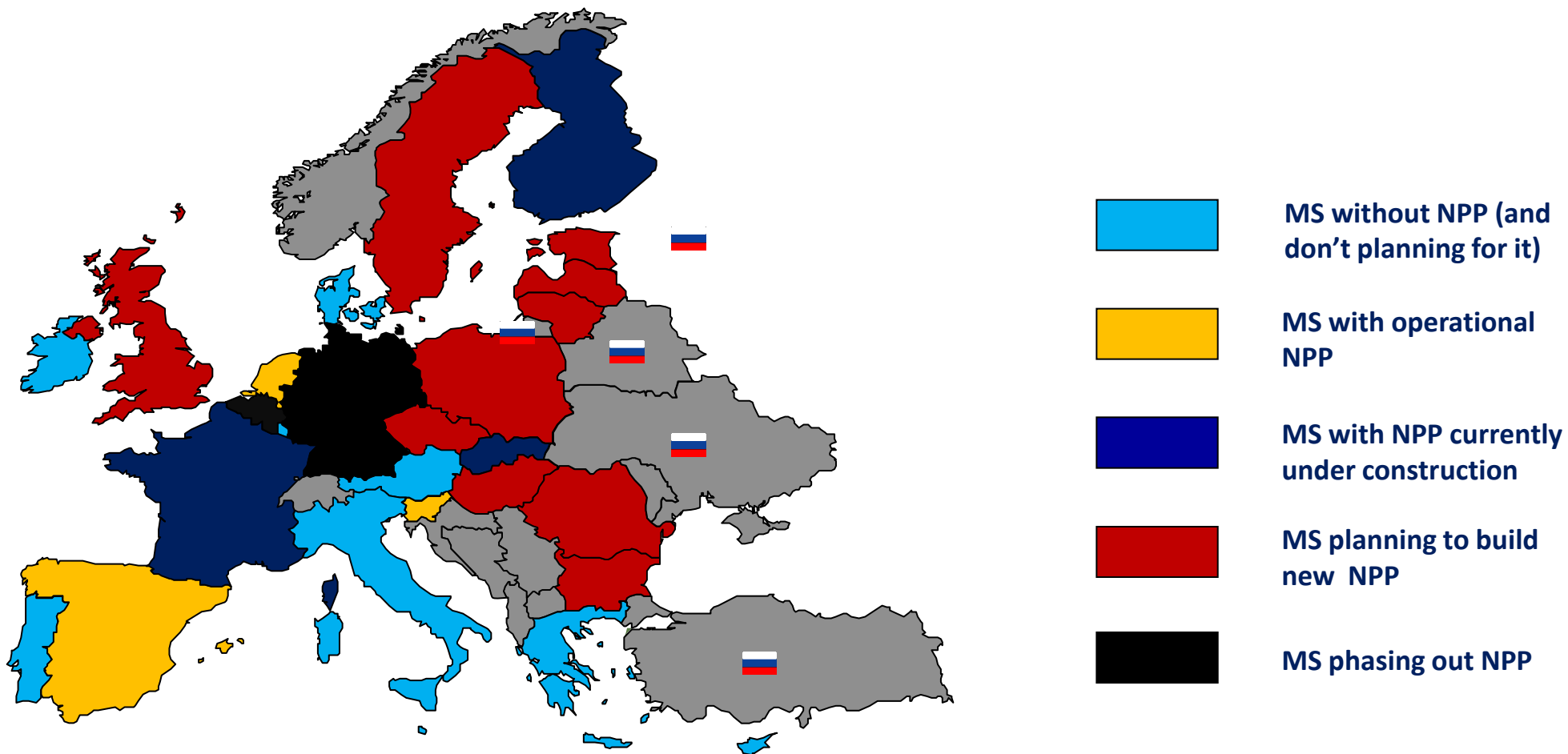


## ... How did the future look like before Fukushima?





## ... How does it look like now\*?



\*Based on current information

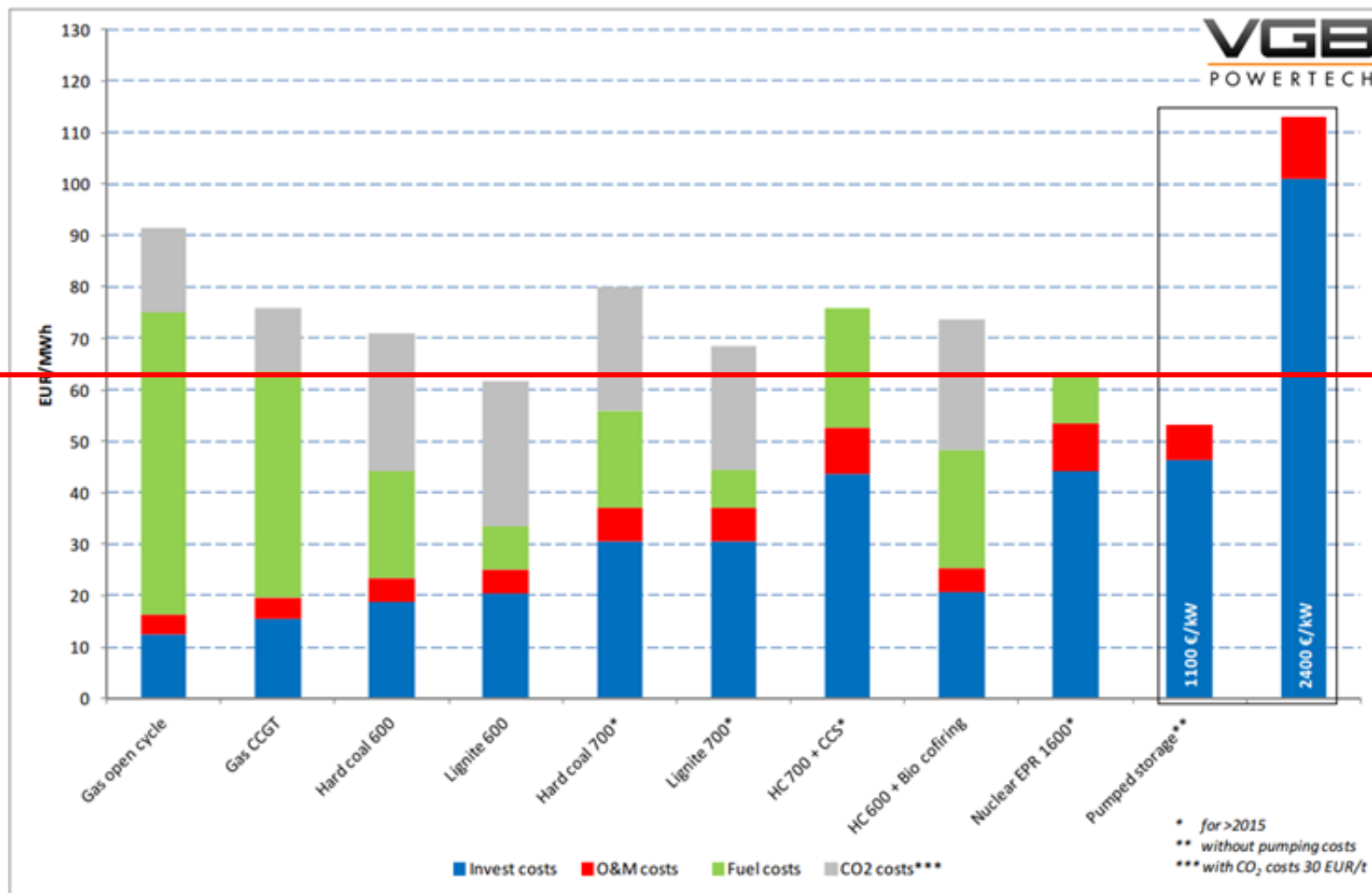


## However, several scenarios do see a role for nuclear power going forward

<b>GHG reduction target in 2050</b>	<b>European Commission Energy Roadmap 2050 scenarios</b>	<b>Nuclear in electricity generation in 2050</b> [eq. capacity operating in Gwe vs 125 GWe today]	
40%	Reference Scenario	26,4%	[161 GWe]
40%	Current Policy Initiatives	20,6%	[117 GWe]
80%	High Energy Efficiency	14,2%	[79 GWe]
80%	Diversified supply technologies	16,1%	[102 GWe]
80%	High Renewables	3,6%	[41 GWe]
80%	Delayed CCS	19,2%	[127 GWe]
80%	Low Nuclear	2,5%	[16 GWe]

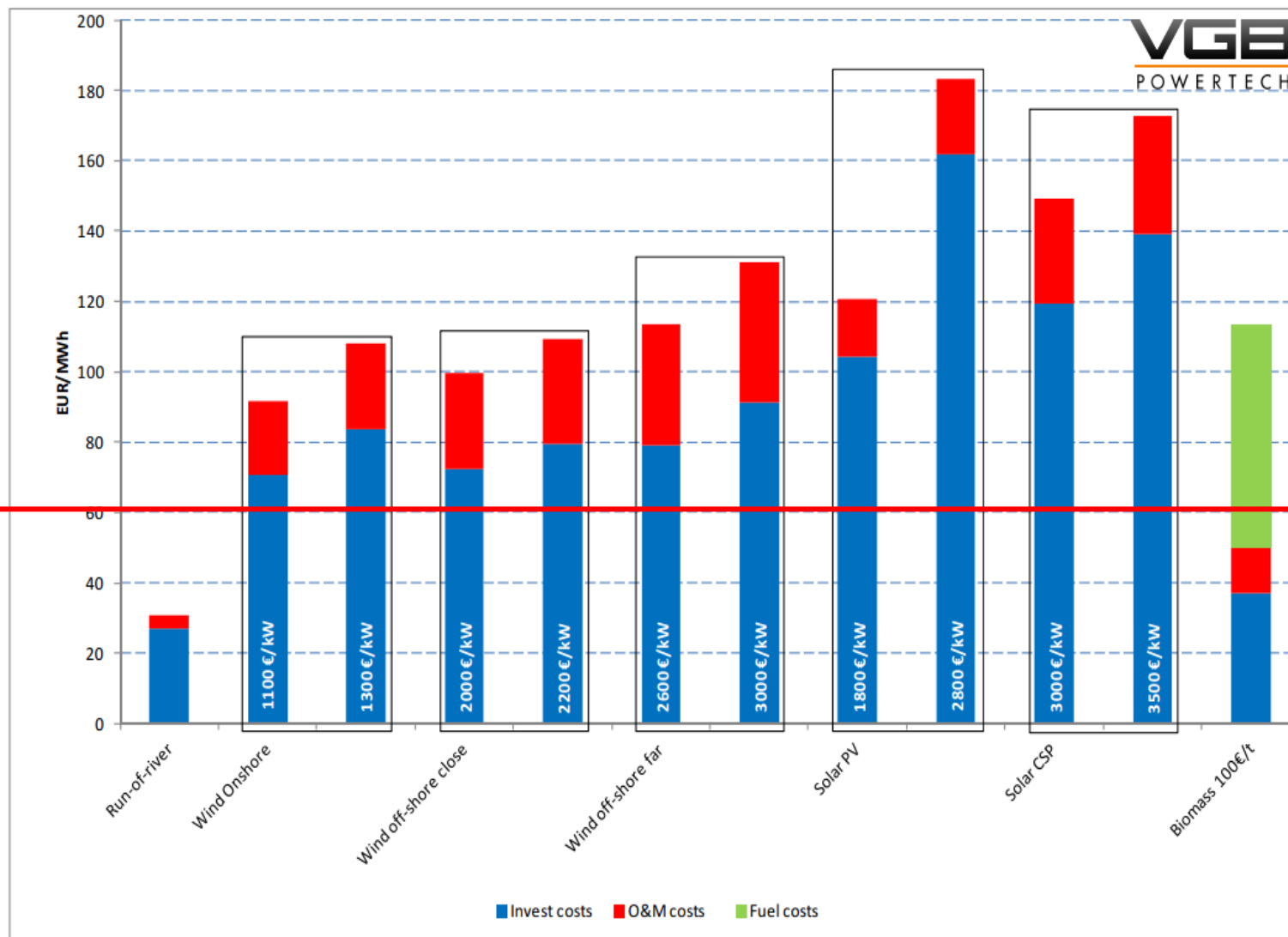


# Nuclear is cost competitive with fossil-fired...





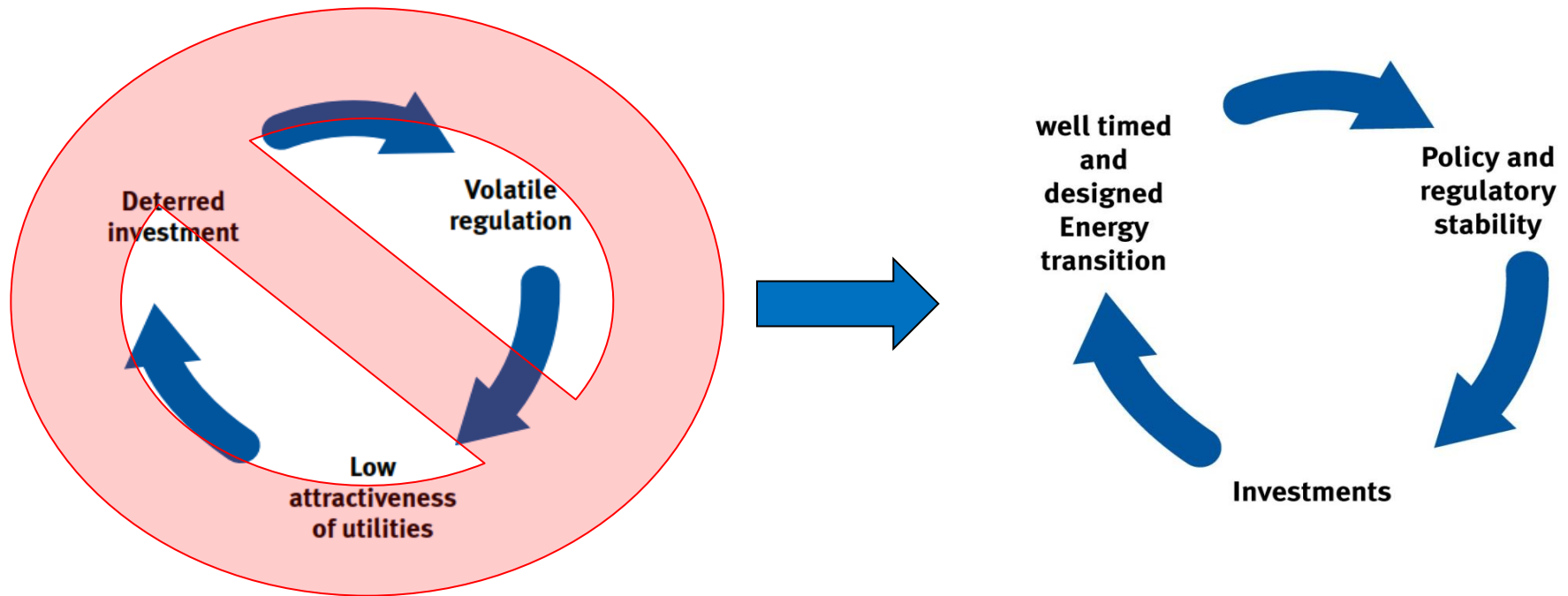
## ... and renewables alike







## From the vicious to the virtuous circle



**Companies need an empowering political /regulatory framework to build the confidence necessary to underpin the investments needed to the energy transition**



## What does nuclear need?

- **An integrated electricity market**
  - Better interconnectivity of the EU power markets is key to unleash the competitiveness of nuclear energy
  
- **A revitalised ETS: EU policymakers should set an ambitious, firm, long-term, economy-wide, greenhouse gas reduction target for 2030 up to 2050, in line with the European Council goal;**
  - CO<sub>2</sub> needs to be fairly priced to incentivise nuclear new build and long-term operation
  
- **Continue working on safety of nuclear installations**
  - To foster public acceptance



**Thank you  
for your attention!**