



European market integration & decarbonisation policy – some issues & implications

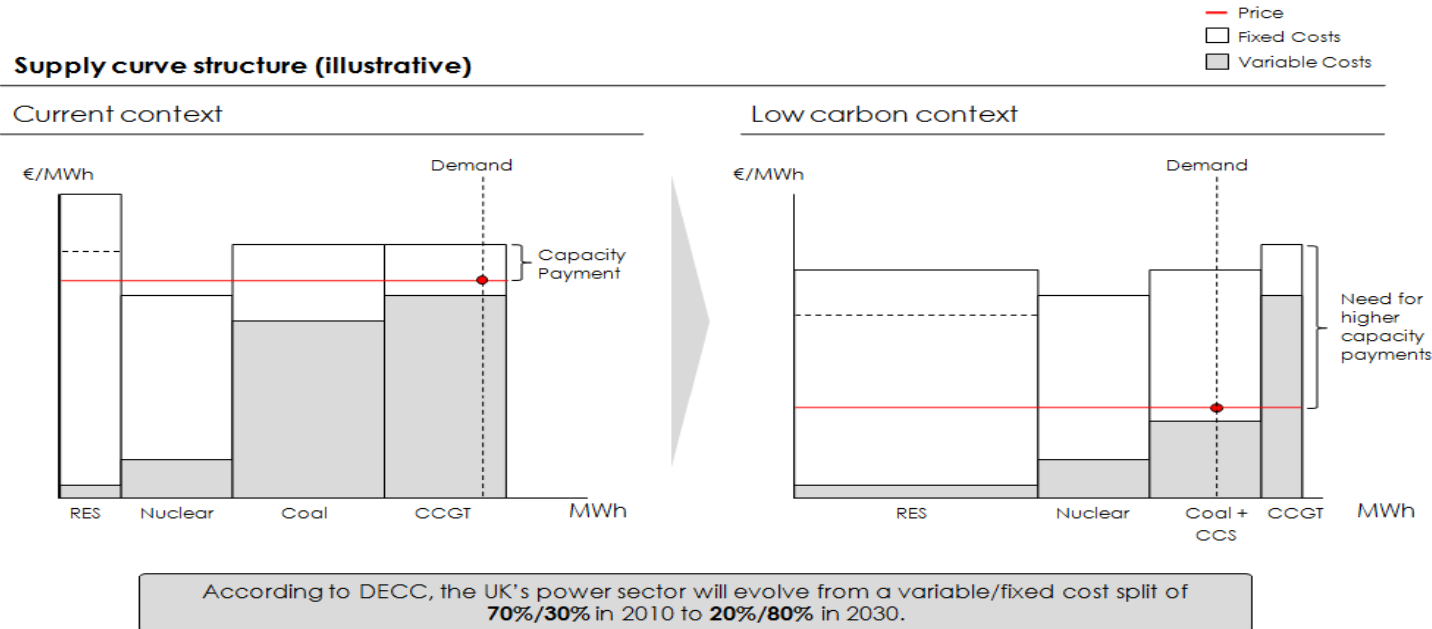
Phil Baker



Delivering a single, decarbonised, European electricity market

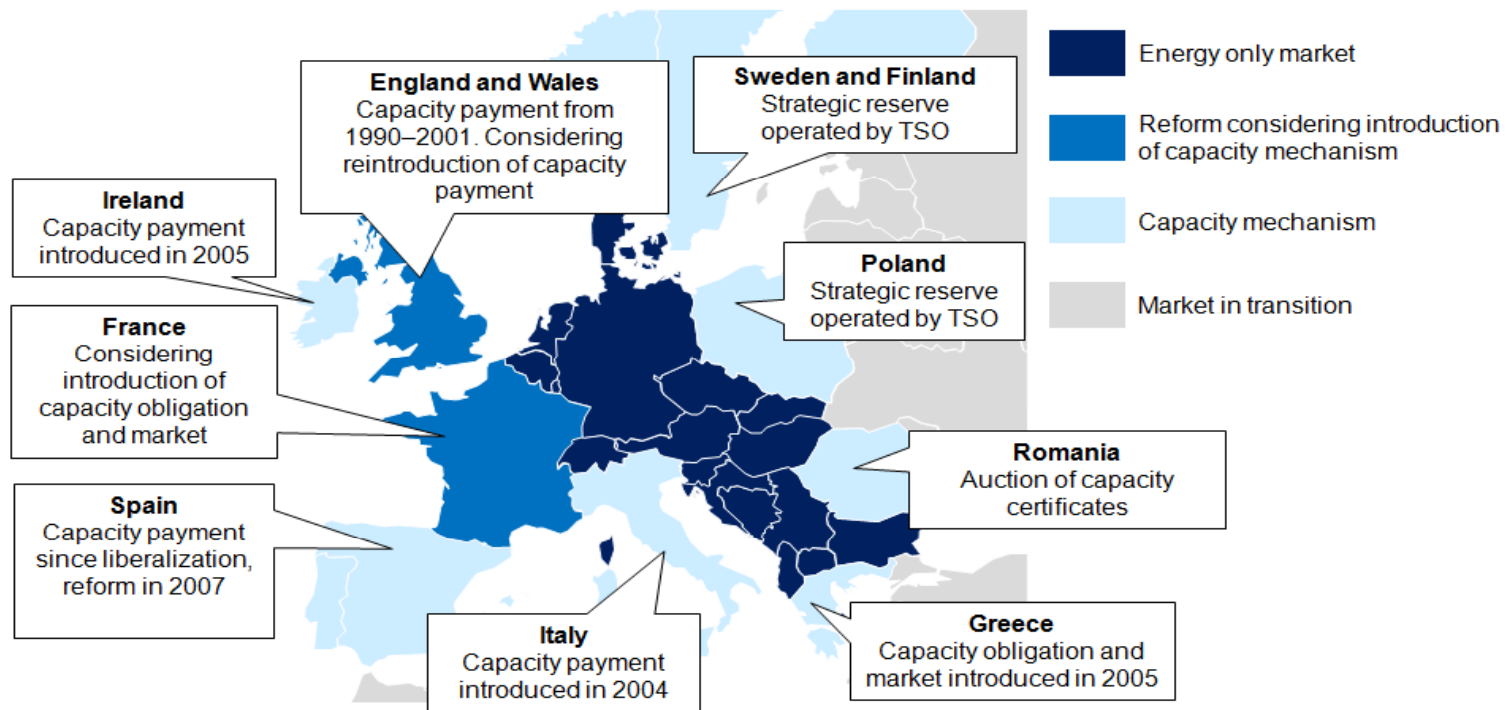
- Three concurrent activities
 - market integration by 2014 within a framework of legally binding Network Codes
 - action by MS to deliver national decarbonisation (based on self-sufficiency)
 - decarbonisation initiatives on a European scale
- Decarbonisation needs market integration, but more co-ordination required if conflicts are to be avoided

Market integration assumes an “energy only” market design



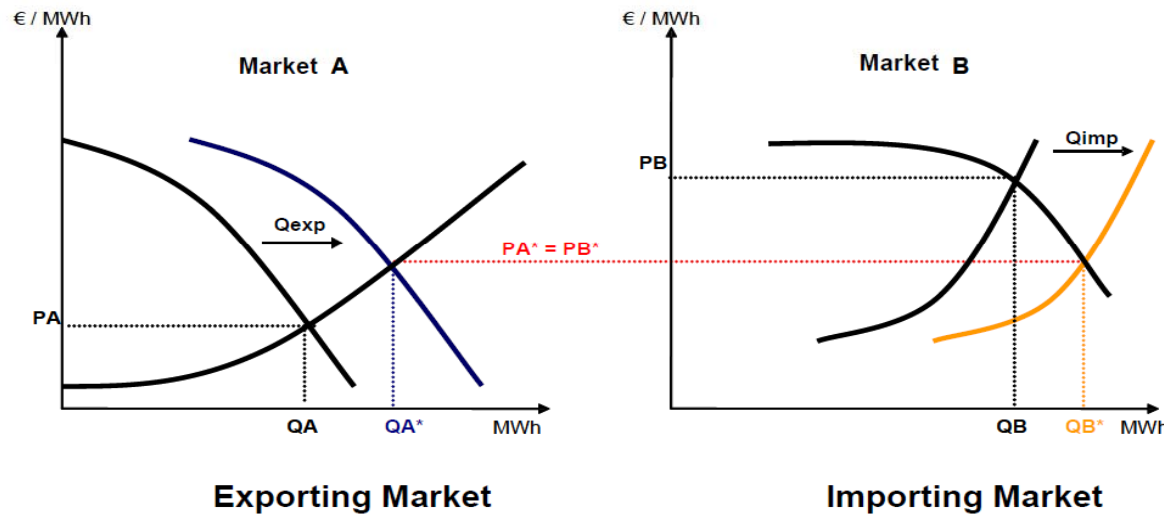
- in a low carbon power sector, majority of costs to be recovered will be fixed rather than variable
- Markets where wholesale prices are set by marginal cost are not ideal, margins will deteriorate and price volatility will increase

Decarbonisation will require capacity support; various schemes being implemented/discussed



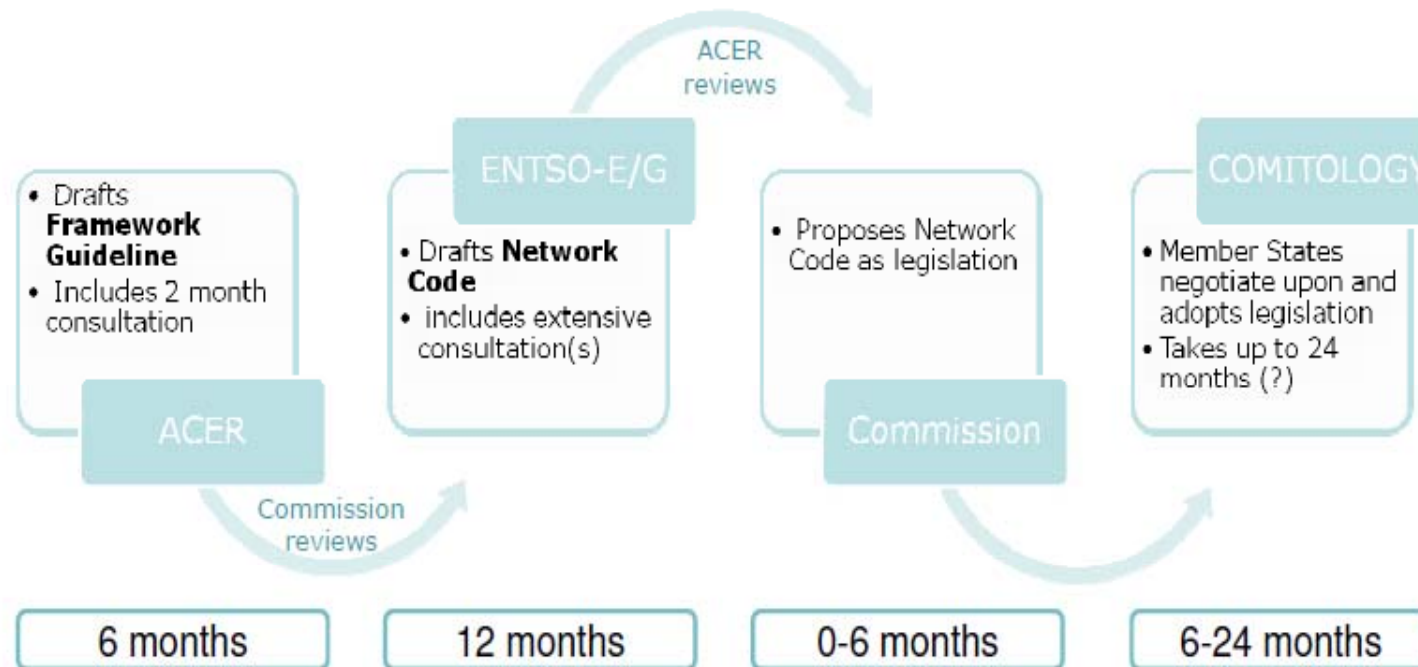
Market coupling

- Two interconnected markets, ATC non congested



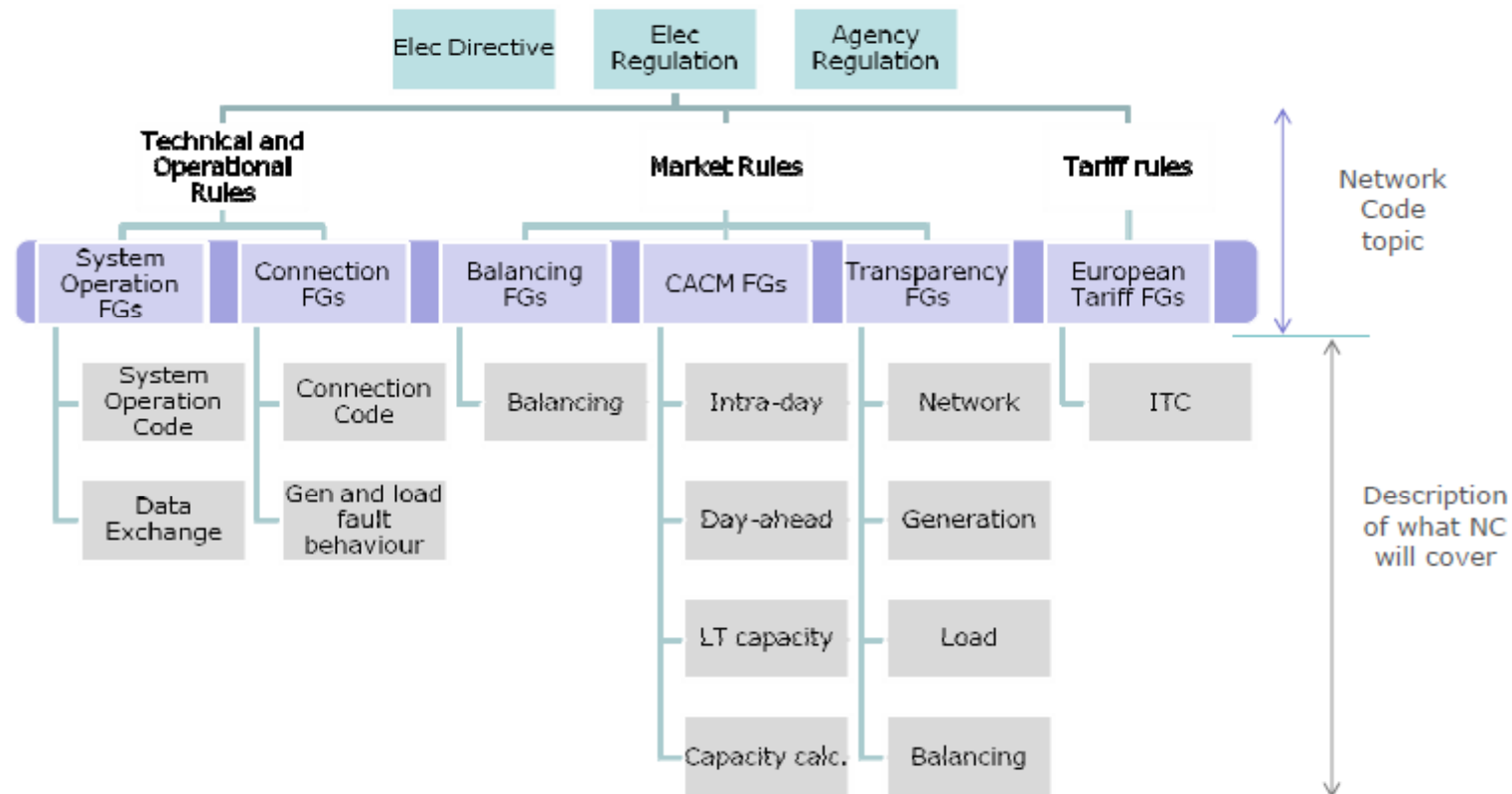
- Energy prices need to be consistent to avoid cross border trade distortions
- Support mechanisms have potential to distort energy prices
- Support mechanisms need to be harmonised as far as practical and/or market coupling approach modified

Process for developing network codes



Market integration work programme

European Network Codes: topics



EC/ACER/ENTSO-E 3 year work plan

Deliverable	ACER FG draft		ENTSO-E code drafting		ACER evaluation	Comitology	2011				2012				2013				2014						
	Start	End	Start	End	Start	Start	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
	Products/legislation relevant for effective implementation of the IEM																								
Framework Guideline (FG) on capacity allocation and congestion management (includes A HA G work)	Q1/11	Q2/11																							
Capacity Allocation and Congestion Management NC ¹			Q3/11	Q3/12	Q4/12	Q1/13																			
Forward Market network code			Q4/12	Q3/13	Q4/13	Q1/14																			
Regional progress, setup and testing																									
EC guideline on governance						Q3/11																			
FG on network connection ²	Q3/11	Q2/11																							
NC on generation connection ³			Q3/11	Q4/11	Q1/12	Q2/12																			
NC on DSO and industrial load connection			Q1/12	Q4/12	Q1/13	Q2/13																			
FG on system operation ⁴	Q1/11	Q2/11																							
NC on operational security			Q3/11	Q3/12	Q3/12	Q4/12																			
NC on operational planning and scheduling			Q1/12	Q4/12	Q1/13	Q2/13																			
NC on load-frequency control and reserves			Q3/12	Q2/13	Q3/13	Q4/13																			
FG on balancing	Q3/11	Q4/11																							
NC on balancing ⁵			Q4/12	Q3/13	Q4/13	Q1/14																			
Draft comitology guideline on transparency						Q4/11																			
Possible Guidelines on incentives to TSOs to increase cross-border trade						Q1/12	Q4/12																		
Possible Guidelines on investment incentives to TSOs						Q1/12	Q4/12																		

LEGEND

FG Framework Guideline
NC Network Code

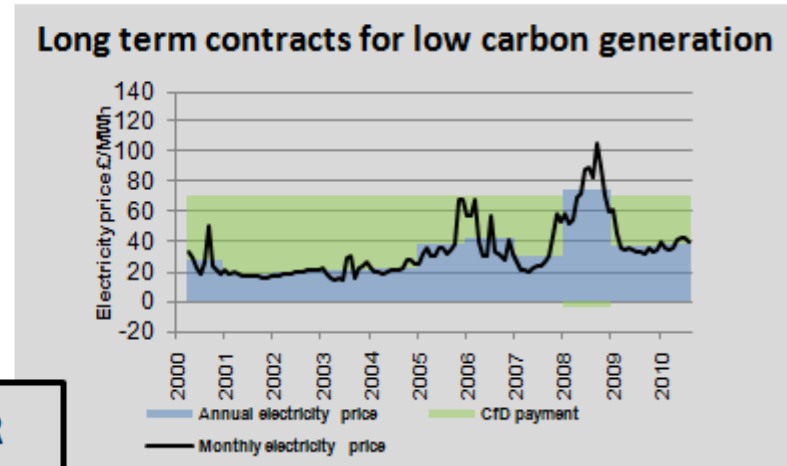
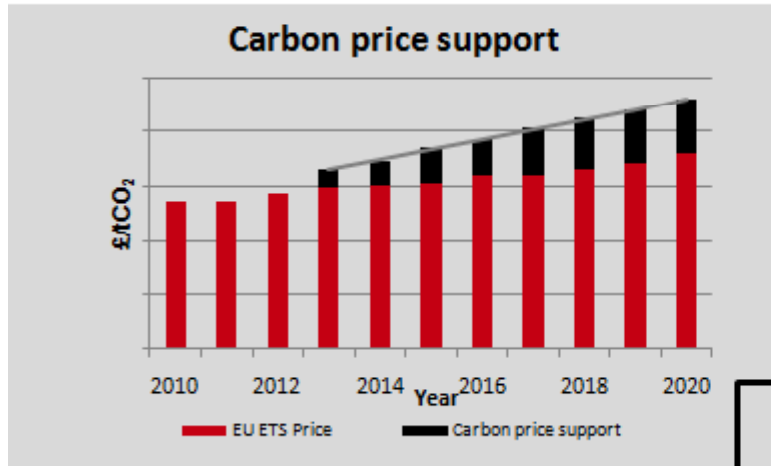
COMMENTS

- CA, CM NC includes Capacity Calculation, Intraday Platform and Day Ahead issues; beginning of formal 12 months NC period assumed to start within Q3/11
- Unofficial work of ERGEG, then shortened 3 months by ACER
- Parallel FG/NC work is a (well reasoned) exception.
- Should not start earlier because it depends on R&D results being pursued in the years until then
- All NCs include information exchange
- Due to the interdependencies the formal work starts only after the DA and ID NCs will be accomplished and after the start of NC on load-frequency control and reserves



Draft 6 April 2011

Implications for GB? EMR



EMR package

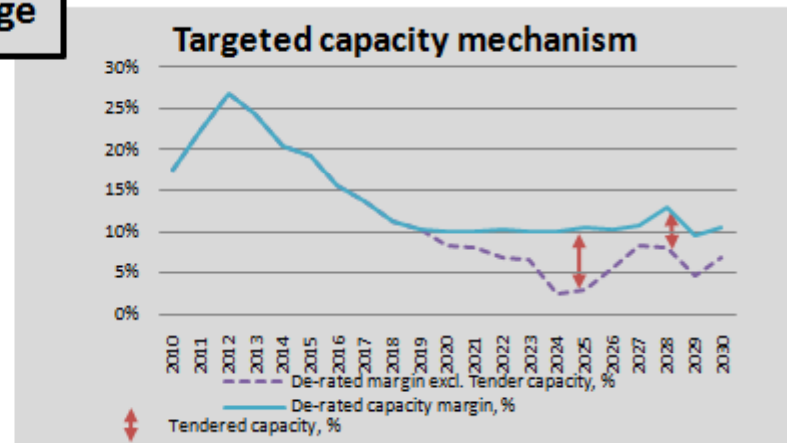
Emissions performance standard

Option 1

EPS set at a level equivalent to 600g CO₂/kWh

Option 2

EPS set at a level equivalent to 450g CO₂/kWh with specific exemptions for plant forming part of UK's CCS Demo programme



Implications for GB?

- Market design, introduction of zonal pricing?
 - bidding areas based on pricing/congestion/topology, not necessarily national boundaries
- Project TransmiT, need to move to something nearer postage stamp charging?
 - locational signals via market coupling
 - harmonise with European practice
- Many other possible impacts
 - balancing arrangements, connection requirements, data exchange etc