

Roadmap to reform of the UK power sector



Assessing the impact of change has become increasingly complex given the scale of the change programme

Power market participants will have to carry out fundamental reviews of their investment strategies and operating models in response to multiple, and complex, changes in policy and regulation. We highlight the importance of understanding the interactions between each driver of change.

The UK power sector has undergone radical change since privatisation in 1990 but since the introduction of BETTA in 2005 there has been a period of relative stability. Now the threefold policy drivers of a move to low carbon generation, maintaining security of supply and assuring affordability bring a new period of change. Coupled with the regulatory drivers of enabling competition, encouraging new entrants into the market and the introduction of smart meters, market participants are faced with uncertainties and upheaval for the remainder of the decade. Their challenge is to navigate their way through the change process efficiently, prioritising scarce resources and limited capital and focusing on the key changes required to maintain margins and enhance their competitive position in the market.

But the sector has dealt with significant change before.

Each policy change is designed to increase the attractiveness of specific investment choices (e.g. Low carbon technologies, reduction of barriers to entry in retail supply or control over demand usage through smart meters). For the new market to be successful, each of these policy changes must be consistent and coherent.

Uncertainty is a fact of life for market participants, whether it be the cost of fuel, wholesale prices, customer demand or financing margins for new investments. But these are day to day issues – the new uncertainties are the timing of policy decisions, the current lack of detailed implementation requirements and the resulting inability to fully assess the impact on business plans and investment opportunities. And it's not just individual policies that need to be assessed; many are interlinked and will have knock-on impacts for other parts of the business. As an example, we look at considerations for an integrated market participant affected by Ofgem's proposed liquidity remedies.

Considerations for a market participant: Ofgem's liquidity measures

The proposals suggest the company should make up to 20% of its generation available for auction. However, the auction platform, process and frequency are unknown; as are the products to be offered, their tenors, pricing policies and collateral requirements. There is no clarity on initial implementation or taking account of existing hedging positions, nor on dealing with large uplifts in capacity from nuclear or offshore wind, nor on any links between FIT prices and auction prices.

The auctions will mean changes to operational procedures, particularly for the trading, finance, generation, retail and governance departments.

This is a large change programme in itself, but the liquidity review cannot be looked at in isolation, as changes to business plans, investment strategy and operations must also take account of other policy changes, including the market reform proposals put forward in the Electricity White Paper, the smart meter roll-out, enhanced reporting requirements, and changes to transmission charging.

There are two alternative reactions for market participants to adopt to a change programme of this complexity and magnitude:

- Delay investment decisions until there is more clarity and respond to policy changes in a reactive manner; or
- Embrace change, respond proactively to policy changes to influence the outcome and drive the change agenda within the organisation.

In order to embrace change and emerge in a strong position in the new environment, market participants must identify the decisions that they need to make and those that are dependent on policy change. They must determine and understand the interaction between the decisions and how these relate to their strategic objectives.

Within a robust decision making framework, market participants will need to identify the work programmes and priority actions needed to achieve their business objectives. They will also need to ensure that they have robust governance processes to empower management in the new market environment.

The complexity of the decision making process is greatest for the VIUs, with their generation portfolios and large retail customer bases. Investment decisions must prioritise scarce capital between a range of competing alternatives including investing in new low carbon generation, new flexible thermal generation, life extensions, new IT systems to support decision making and operations under the new market regime, and business transformation programmes. In addition, these investment options will be competing with opportunities in other markets.

Specialist market participants will wish to focus on those policy areas that impact their operations, be it retail or generation, but will still need to understand the interactions with other initiatives.

It is clear that the extent of changes to the UK electricity sector over the remainder of the decade is significant and will provide a range of challenges for market participants. But previous market changes, including full retail liberalisation, the introduction of NETA, and subsequently of BETTA, show that the industry is able to cope with change.

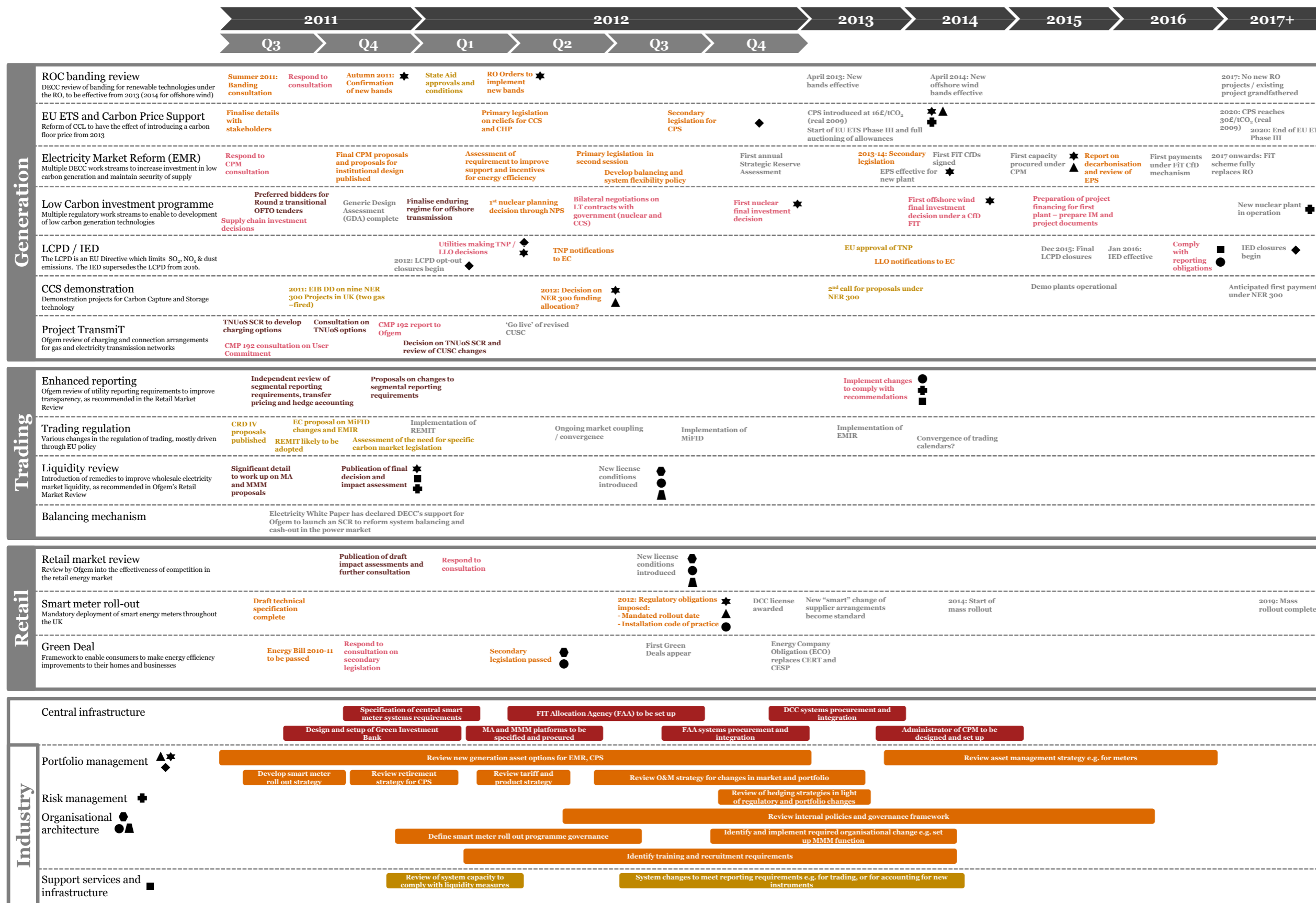
Those participants that approach change with an open mind, proactively engage with Government, Ofgem and other stakeholders and make an early start on developing and implementing co-ordinated change programmes across the business, will find themselves in a strong position to identify and capture value in the new market environment.

Critical actions for market players

1. Map the impact of each policy change to the challenges faced by each business unit to assess operational and value implications
2. Rank the policy changes in terms of financial impact on the business and in terms of time to implementation
3. Proactively respond to the policy debate, proposing solutions to deal with issues raised.
4. Determine the internal projects required to embed each policy change within the relevant business units
5. Assess the interdependencies between the internal projects to determine priorities
6. Assess the interdependencies between internal projects and central projects for each policy change
7. Develop a timeplan for the overall change programme, to review and update as more clarity on the policy changes becomes available

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Quarter 3, 2011



Decision types

- ▲ O&M
- Organisational change
- Systems
- Governance & reporting
- ★ Investment
- ⊕ Hedging physical position
- ◆ Retirement
- ▲ People & Change

Key

Outcomes

Stakeholders

- Government
- Industry
- Ofgem
- EU

Acronyms

- CCL – Climate Change Levy
- CCS – Carbon Capture and Storage
- CERT – Carbon Emissions Reduction Target
- CESP – Community Energy Saving Programme
- CfD – Contract for Difference
- CHP – Combined Heat and Power
- CMP – CUSC Modification Proposal
- CPM – Capacity Payment Mechanism
- CPS – Carbon Price Support
- CRD – Capital Requirements Directive
- CUSC – Connection and Use of System Code
- DCC – Data Communications Company
- DECC – Department of Energy and Climate Change
- EMIR – European Market Infrastructure Regulation
- EMR – Electricity Market Reform
- EPS – Emissions Performance Standard
- ETS – Emissions Trading Scheme
- FIT – Feed in Tariff
- IED – Industrial Emissions Directive
- LCPD – Large Combustion Plant Directive
- LLO – Limited Lifetime Obligation
- MA – Mandatory Auctions
- MiFID – Markets in Financial Instruments Directive
- MMM – Mandatory Market Maker
- REMIT – Regulation of Energy Market Integrity and Transparency
- RO – Renewables Obligation
- ROC – Renewable Obligation Certificate
- SCR – Significant Code Review
- TNP – Transitional National Plan

Policy dashboard

UK energy policy is focused upon reducing the environmental footprint of power generation and protecting consumers, whilst maintaining security of supply. The policy dashboard summarises our view of progress that has been made against the Government's objectives.

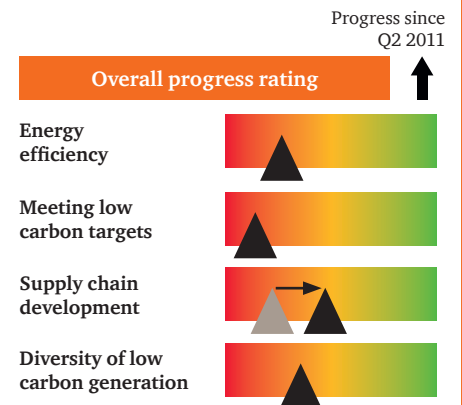
Progress towards a low carbon future

Progress made

- Adoption of ambitious CCC recommendations and introduction of CPS from 2013 improves chances of meeting CO2 abatement goals
- Significant pipeline of low carbon generation projects awaiting detailed policy definition
- EMR proposals for FiT CfDs could – if designed well – increase capital availability for investment in low carbon generation
- Renewables Roadmap demonstrates commitment to developing supply chain and reducing the cost of emerging technologies

Priorities for action

- Significant detail of FiT CfD proposals needs to be worked up. In particular, clear volume and price signals are required as well as a detailed understanding of the institutional arrangements.
- Clarity over management of new nuclear post-Fukushima and the implications on timescales for meeting policy objectives
- Review of incentives and support for energy efficiency
- Delivery of an effective solution for the Green Deal



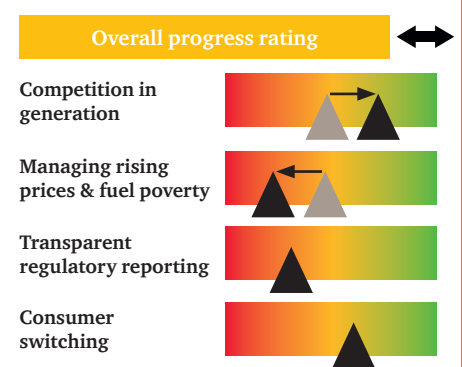
Protecting consumers

Progress made

- Indication that FiT CfDs will become more competitive over time
- Reasonable levels of competition in power generation with many independent investors
- Ofgem retail market review (RMR) could result in significant changes to the wholesale market, intended to improve retail competition
- RMR has an objective to increase the comparability of information available to consumers
- Reasonable level of consumer switching

Priorities for action

- Need for clarity over the requirements for more transparent regulatory reporting with visible and consistent transfer pricing
- Significant detail required on RMR proposals, in particular changes to the wholesale market – the implications for the VIUs, their investment pipelines, systems, and processes need to be fully understood
- Decision on form of CPM required, confirming likely cost to the consumer
- Need to understand collateral requirements associated with liquidity proposals and an increase in contracting counterparties



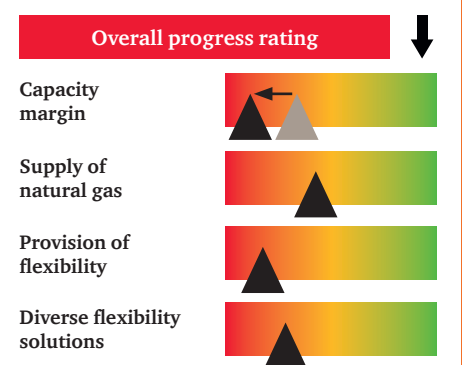
Maintaining security of supply

Progress made

- Impact of recession on demand has reduced the extent to which capacity is required – reflected in current low spreads
- EMR proposals for a capacity payment mechanism (CPM) are intended to provide sufficient flexibility in the system to complement more intermittent generation
- Smart meter roll out timetable confirmed, which should be a key enabler for demand-side flexibility providers

Priorities for action

- Detailed EMR proposals required to clarify that both flexible gas generation and other flexibility providers will be within the scope of the CPM
- Output from gas SCR and likely SCR on balancing in the power market required
- Consultation on CPM required to confirm scope and structure of mechanism
- Urgent need for policy detail to prevent extended hiatus and a longer term security of supply risk



Contacts

If you would like to discuss the contents of our “Roadmap to Reform” document further please contact one of our power sector specialists from our Strategy Consulting team.



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“How will I adjust my trading organisation to reflect changes in my underlying business?”



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“How will I make timely investment and retirement decisions given the current uncertainty over the regulatory environment?”

“How will I reflect regulatory change in my retail & pricing strategy?”

“How will my IT systems need to change so that I can continue to run my business effectively?”

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