

Electricity Market Reform

National Grid Future Energy Scenarios, July 2013
Emily Bourne, Department of Energy and Climate Change

Agenda



- 1. Context and Overview
- 2. Contracts for Difference
- 3. Capacity Market
- 4. Delivery Plan
- 5. Next Steps

The rationale for EMR: Our electricity market faces big challenges











The complete market reform framework



Government

Sets overall policy direction and sets out key parameters

System operator (National Grid)

Will advise government on contract parameters and administer the arrangements

Contracts to develop low carbon generation – contracts for difference

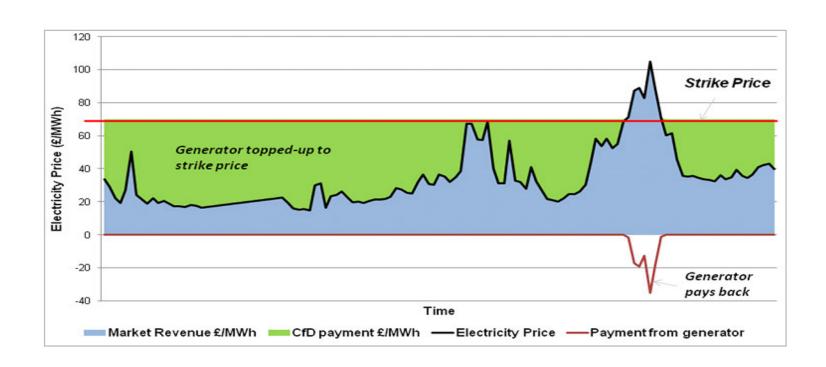
Capacity market: open to all forms of capacity

Existing wholesale market (plus small-scale FiTs)

Investment in low-carbon generation also supported by Carbon Price Floor & Emissions Performance Standard

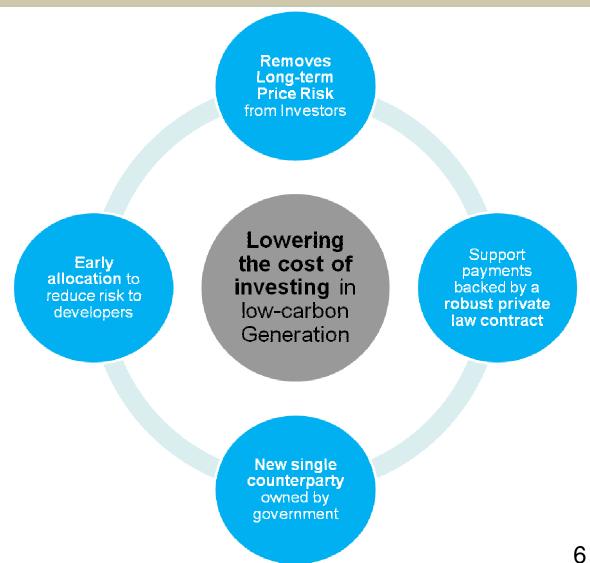
CfDs provide long term revenue stabilisation for low carbon technologies





CfDs are designed to provide greater certainty to investors





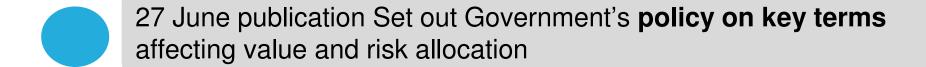
Draft CfD Strike Prices (£/MWh, 2012 prices)



<u>Technology</u>	2014/15	2015/16	2016/17	2017/18	2018/19
Advanced Conversion Technologies (with or without CHP)	155	155	150	140	135
Anaerobic Digestion (with or without CHP) (>5 MW)	145	145	145	140	135
Biomass Conversion	105	105	105	105	105
Dedicated Biomass (with CHP)	120	120	120	120	120
Energy from Waste (with CHP)	90	90	90	90	90
Geothermal (with or without CHP)	125	120	120	120	120
Hydro (>5 MW)	95	95	95	95	95
Landfill Gas	65	65	65	65	65
Offshore Wind	155	155	150	140	135
Onshore Wind (>5 MW)	100	100	100	95	95
Sewage Gas	85	85	85	85	85
Solar Photo-Voltaic (>5MW)	125	125	120	115	110
Tidal Stream	305	305	305	305	305
Wave	305	305	305	305	305

CfD Contract Terms High-level positions





Significant aspects of the announcement:

- 100% indexation to CPI
- Baseload reference price: season-ahead, moving to year-ahead
- Termination: narrower scope & removing 'hair-triggers'
- Change of Law: some broadening of cover
 General changes, without objective justification
 Adjustments for some system costs and 'curtailment' risks

Next steps on CfD contract terms and allocation



Date	Milestone
Early August 2013	Draft contract terms & allocation design published
Summer 2013	Engagement with stakeholders on contract drafting and allocation design
Autumn 2013	Government consultations on secondary legislation for EMR
Winter 2013	Final Strike Prices, Contract Terms and Allocation design published
2014	First CfDs allocated

Capacity Market: why it's needed



Closure: around a fifth of existing

capacity closing in the next decade

Market failures:

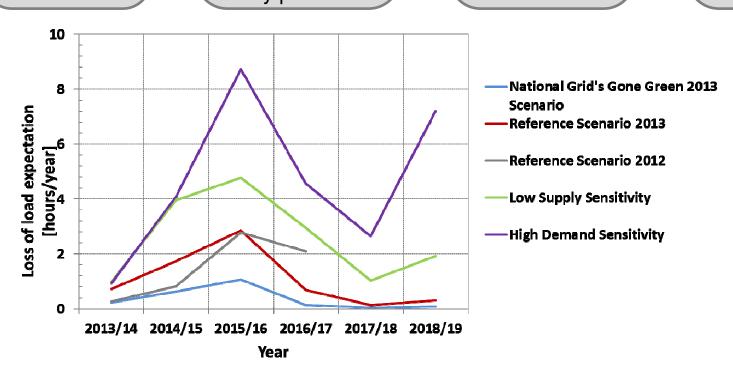
e.g. reliability is public good, SO actions in scarcity situations not fully priced in

Intermittency and inflexibility:

large proportion of new capacity will be intermittent or less flexible

Insufficient incentives to invest in reliable capacity:

harder for reliable / despatchable capacity to capture revenues, leading to under- investment



Security of Supply – announced alongside the Spending Review



2014-2017 (if needed)

Ofgem consultation on whether to go ahead

Made up of existing plants and demand side resources

Extension of National Grid's existing reserve capacity

2018 onwards - Capacity Market

Confirmed: 2014 initiation for 2018 delivery

Medium to long-term solution

Will incentivise new plants and demand side, as well as keeping existing capacity on system

Subject to legislation, and state aid clearance

Capacity Market Reliability Standard



Capacity to contract

- Enduring reliability standard established by Govt consulting on Loss of Load Expectation of 3 hours
- System Operator forecasts peak demand, and translates into a capacity requirement to meet Reliability Standard

Next steps for the Capacity Market



Date	Milestone
Autumn 2013	Government consultations on secondary legislation for EMR
Winter 2013	Final Capacity Market reliability standard published (in Delivery Plan)
2014	First capacity auction

The Draft Delivery Plan – published 17 July



Chapter	Description
1	Introduction
2	Contracts for Difference for Renewables
3	Capacity Market – Reliability Standard
4	Summary of Price and Bills impact
5	Forward look to 2030
6	Next steps
Annex A	Developing the modelling and analysis
Annex B	Strike price methodology
Annex C	Reliability standard methodology
Annex D	Levy Control Framework
Annex E	Report from the System Operator (National Grid)
Annex F	Panel of Technical Experts Report

Consultation closes 25 September 2013

Forward look to 2030



- Situation in 2030 depends on which technologies prove cheapest
- Government has published potential scenarios in Chapter 5 of the Draft Delivery Plan
- Scenarios are based on different views of how key technologies will develop

We are working towards implementation in 2014...



Draft CfD Strike Prices
Headline CfD terms
CM design and first
auction confirmed
Draft EMR Delivery
Plan for consultation
June/July 2013

CfD contract
drafting and
Allocation
Policy
Update on
CfD Supplier
Obligation
July/Aug 2013

Start implementation process with industry

August 2013

Secondary legislation consultation

Oct 2013

Royal Assent (subject to will of Parliament) Final EMR Delivery Plan Final CfD contract

End 2013

- First CfDs signed under enduring regime 2nd half of 2014
- First Capacity Market auction end 2014