



Department
of Energy &
Climate Change

Next Steps in CCS Policy: Responses on CfD and Allocation Design

15 December 2014
Stakeholder workshop



UK Electricity Market Reform

– key objectives and mechanisms

Security of supply

Climate change

Affordability



- Feed-in Tariff Contract for Difference (CfD) – mechanism to bring forward investment in low carbon generation portfolio
- A Capacity Mechanism – to ensure we have reliable capacity
- A Carbon Price Floor – a tax on fossil fuels linked to their carbon intensity
- An Emissions Performance Standard – backstop to limit emissions from new fossil fuel plants
- £7.6bn Levy Control Framework (LCF) to 2020/21 to fund support for low C generation



CFDs

1

Removal of wholesale electricity price exposure

2

Guaranteed private law contractual arrangement

3

Robust single counterparty

4

Early certainty and security of support levels

For developers

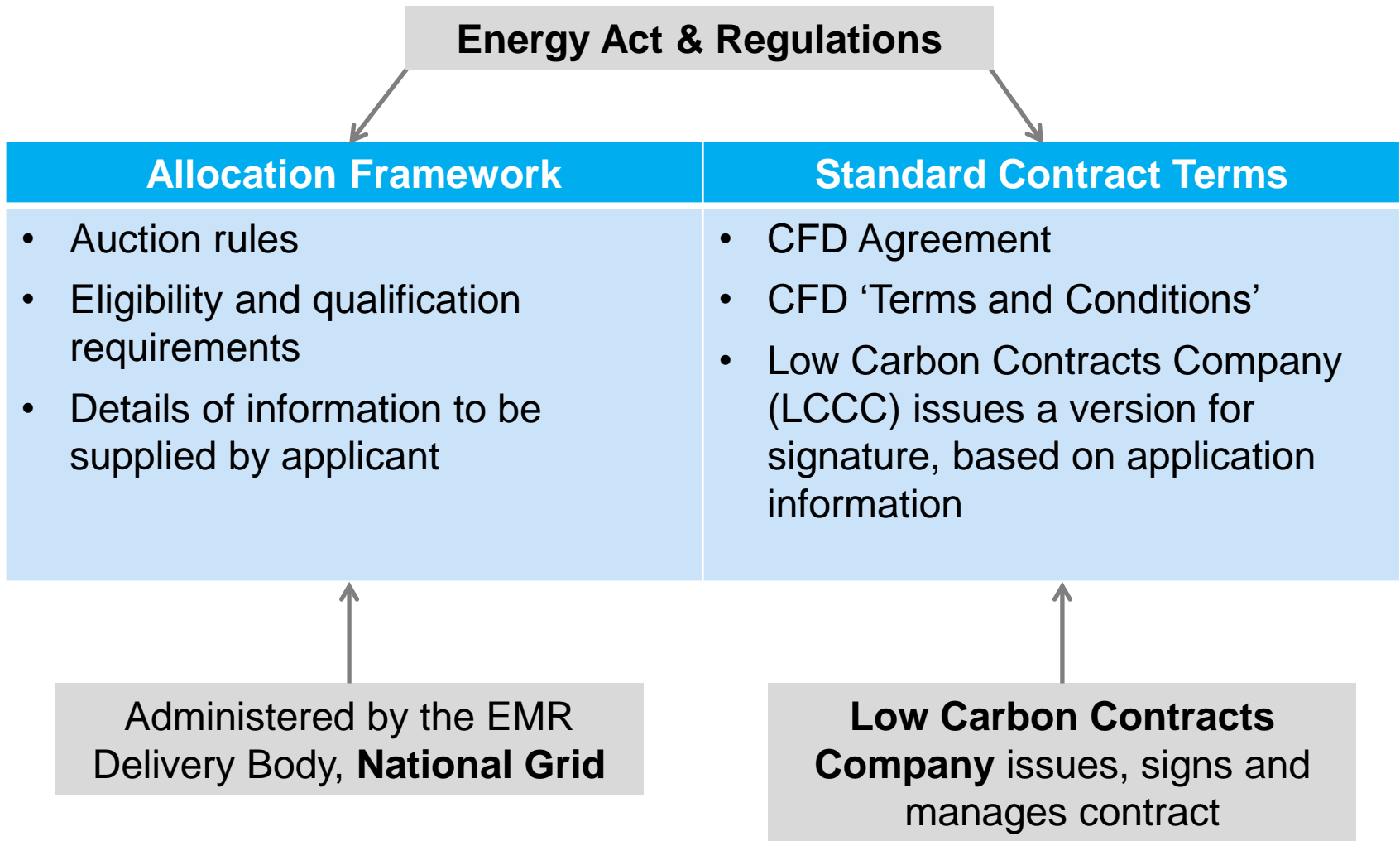
- *Regular cycle of budget release*
- *First renewables allocation round this autumn*
- *Information on timing of future rounds soon to give a clear line of sight to developers*

For consumers

- ***Competitive auctioning** becomes a regular part of the landscape*
- *Driving value for money and cost reductions*
- *Reduces exposure to risk*



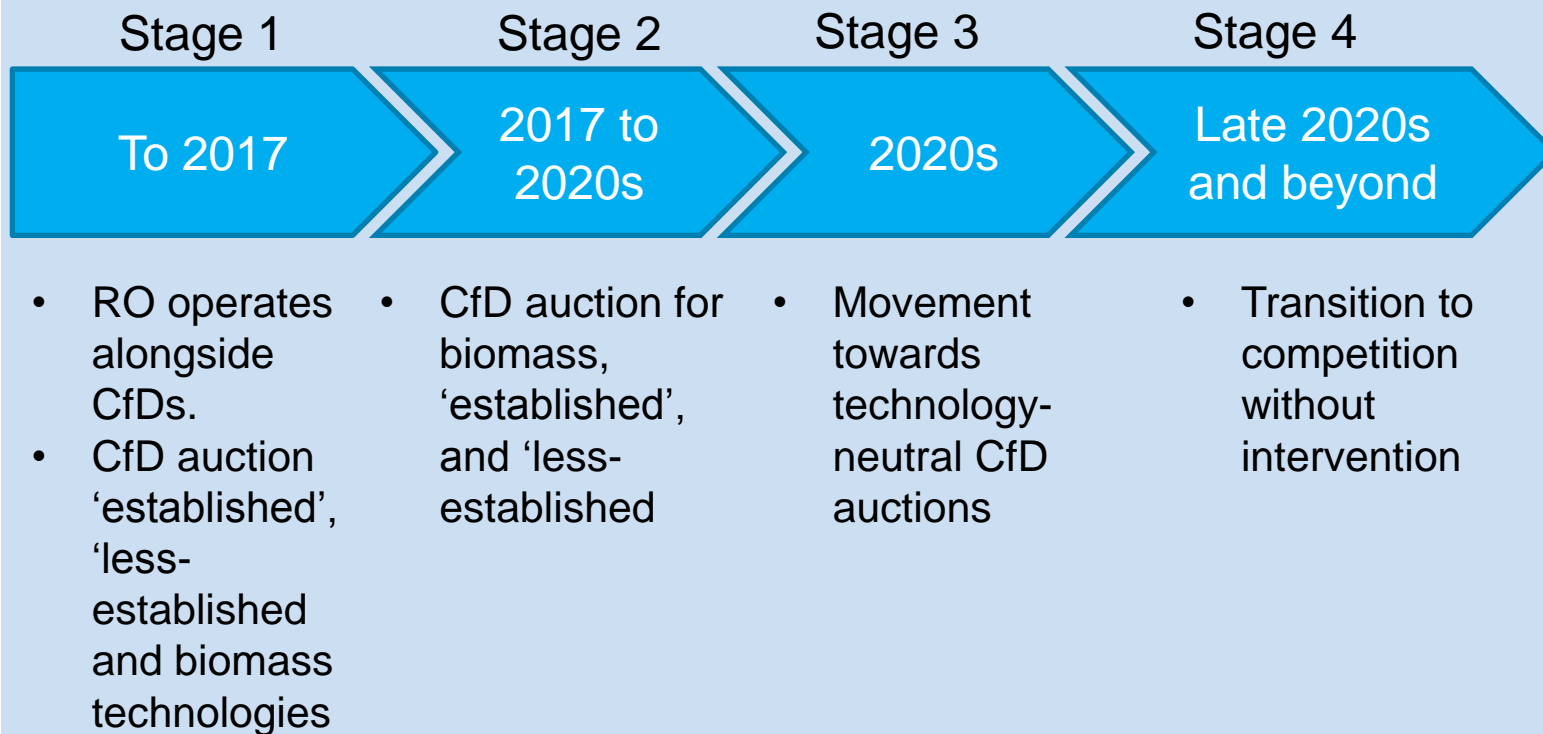
Key components of the CFD framework





EMR Long term vision

The four stages of EMR





CCS: Strategic importance

CCS can make a significant contribution to meet Government's objectives of decarbonising economy, and electricity generation as part of it, cost-effectively

Security of supply

Fossil fuel generated 56% of the electricity mix in August 2014 and is likely to remain a key fuel source



Affordability

Without CCS climate targets £30bn more expensive per year by 2050
Potential to become cost-competitive with other low carbon generation

Climate change

Target of an 80% reduction in emissions by 2050

GHG reduction of 40% by 2030 across the EU



Jobs and growth

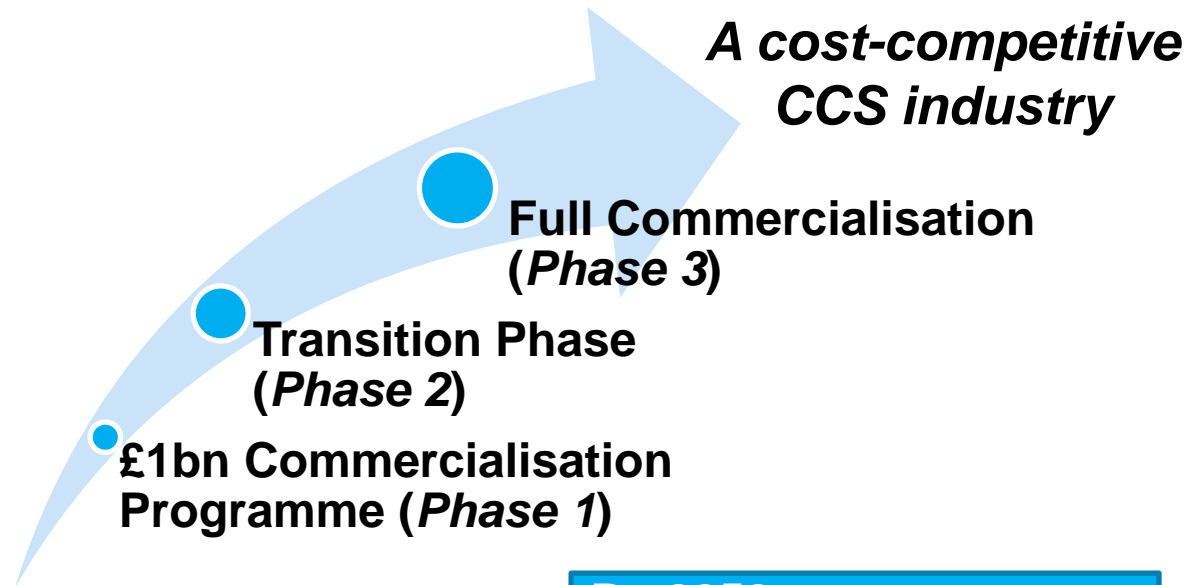
Part of a low carbon economy
Key technology for decarbonising energy intensive industries



Path to full commercialisation

By 2030

- Between 1 and up to 13 GW of CCS power (EMR Delivery Plan scenarios)



By 2050

- CCS could provide up to 20% of the UK's energy
- Saving £30 bn (ETI)



CCS Commercialisation Programme

It provides opportunity for developers to share with Government the risks of project development, construction and operation of the UK's first commercial-scale CCS projects:

- Grant to support project development and construction
- Grant to support for detailed engineering design studies (i.e. FEED)
- Operational support through Contracts for Difference (CfD)
- Final package yet to be agreed with preferred bidders.
- Decisions expected early 2016.



Next steps in CCS CfD and allocation design

The Government has made a commitment to put in place the principles of a CfD and allocation design by 2016 that could enable future CCS projects to come forward.

1. Provide clarity for those considering investment in future CCS projects about support that will be available, subject to future Ministerial decisions on the LCF
2. Work to be taken forward in a way as to maximise learning from the Competition while protecting integrity and confidentiality of the negotiations
3. Arrangements for future projects to reflect increasing transfer of risks from consumers back to industry.



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Emerging messages from Policy Scoping Document on CfD and allocation design



Key messages from responses

1

CCS Development timelines and risks

2

Allocation mechanism

3

CfD terms and other measures



CCS Development timelines and Risks

Developers not currently willing to invest in project development at their own risk to a point where FID can be taken.

Developers tell us that:

- a clear Government signal/target on future CCS deployment to drive developers to make the necessary pre-capital investment to bring their projects to a point where FID can be taken.
- Particular proposals included:
 - Commitment to CCS specific LCF funding and a transparent allocation process;
 - Guaranteed minimum level of CCS deployment;
 - Direct grant support for development costs;
 - Allocation of CfD before capital and operating costs are fixed.



Allocation Mechanism

Willingness to compete with other CCS projects for the allocation of CfD's, but generic allocation process not seen entirely suitable.

Developers tell us that:

- a clear transparent allocation process for projects beyond the CCS Commercialisation Programme is required to provide visibility on future market.
- Particular proposals included:
 - Generic allocation framework favoured but also wanted this to be tailored to the needs of specific projects.
 - Tenders (coupled with bilateral negotiations) favoured, although wanted a less burdensome process than the current competition.
 - Some were directly opposed to auctions for early stage projects on the basis of poor cost and delivery estimates;
 - Projects should not be selected on the basis of price alone. Broader evaluation criteria needed - including strategic benefits of different projects, maximising value from initial CCS infrastructure;



CfD terms and other measures

Developers tell us that the design of the CfD will need to be adapted to suit the operational and risk profile of CCS projects including:

- Indexing the Strike Price for fuel costs;
- Contract terms longer than 15 years;
- Risk transfer to the consumer through arrangements to adjust the strike price on CCS specific capital and early stage operational risks including storage site performance;

Also tell us that equivalent incentivisation arrangements will be required for the non-power sector, and that additional measures are necessary to drive investment in storage and address leakage liabilities.



Questions for discussion

1. Does our characterisation of the responses to the Policy Scoping Document reflect your understanding of these issues?
2. Do you agree these are the right set of issues to focus on as we design an enabling policy framework for future CCS projects?
3. Is there any further available evidence that DECC should review before any of these issues are discussed in more depth in workshops in the New Year?
4. What are the priorities and how can we most effectively take this work forward?



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Thank you

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