







CFD Implementation Event: Introduction for New Applicants









Welcome and Introduction

18 June 2015

AGENDA

Timing	Session	Delivery partner
09.30	Welcome and Introduction	Low Carbon Contracts Company
09.40	Overview of EMR	Low Carbon Contracts Company & National Grid
10.10	The CFD Contract	Low Carbon Contracts Company
10.40	Break	
10:55	Overview of CFD Allocation Process	National Grid
11:35	Stakeholder Engagement Session	Low Carbon Contracts Company & National Grid
12:05	Plenary and Close	

Those wishing to use the wifi should search for **OneGreatGeorgeStreet** on their device and then click the button to accept the Terms and Conditions of use









Overview of EMR

Ruth Herbert 18 June 2015

Agenda

- 1. Electricity Market Reform
- 2. EMR Companies
- 3. CFD Overview
- 4. Timeline
- 5. Further information

The trilemma



What is EMR?

The Government's Electricity Market Reform programme is aimed at attracting up to £100bn investment needed to transform the sector.

EMR includes:

- Contracts for Difference (CFD)
 scheme to support investment
 in new low carbon generation
 (replacing the existing
 Renewables Obligation) and
- Capacity Market scheme to facilitate security of supply.

DECC created **two** companies to help deliver these schemes:

 Low Carbon Contracts Company Ltd (LCCC)

and

 Electricity Settlements Company Ltd (ESC)

Agenda

- 1. Electricity Market Reform
- 2. EMR Companies
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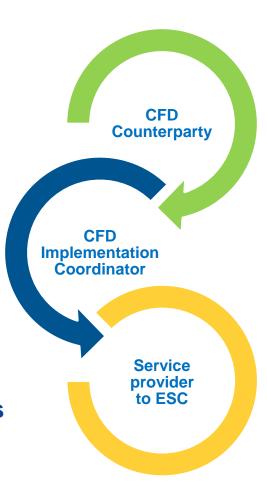
About LCCC

Low Carbon Contracts Company is a governmentowned company established to be the independent counterparty to private law contracts known as "EMR CFDs".

LCCC is also committed to working in partnership with EMR delivery partners and industry to oversee the delivery of the end-to-end CFD scheme, facilitating:

- Delivery Partner Cooperation and
- Industry Readiness

LCCC also runs **Capacity Market settlement operations** on behalf of the Electricity Settlements Company.



Who we are

Senior Team



Neil McDermott Chief Executive



Martin Read Chairman



Helen Turner Chief Financial Officer



Claire Williams Head of Legal & Company Secretary



Ruth Herbert Head of Strategy & External Relations



Nic Rigby Head of CFD Operations



Cynthia Duodu Head of Corporate Services



James Rushton Head of Nuclear

Board

Martin Read (Chair)

Jim Keohane (Senior Independent Director)

Neil McDermott

Helen Turner

Non-executive directors:

Anne Baldock

Tony Bickerstaff

Marion King

Jonathan Mills

Anthony Odgers

Dr Simon Orebi Gann

Tony White

"Our non-executive directors bring a wide range of expertise covering energy markets, finance, law, construction, settlement systems, regulatory oversight and government policy." **Martin Read, Chair**

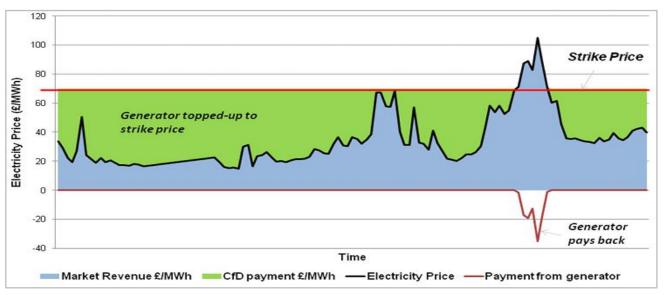
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CFDs designed to provide long-term price certainty for low-carbon technologies

CFDs pay a **variable 'top-up'** to developers, based on:

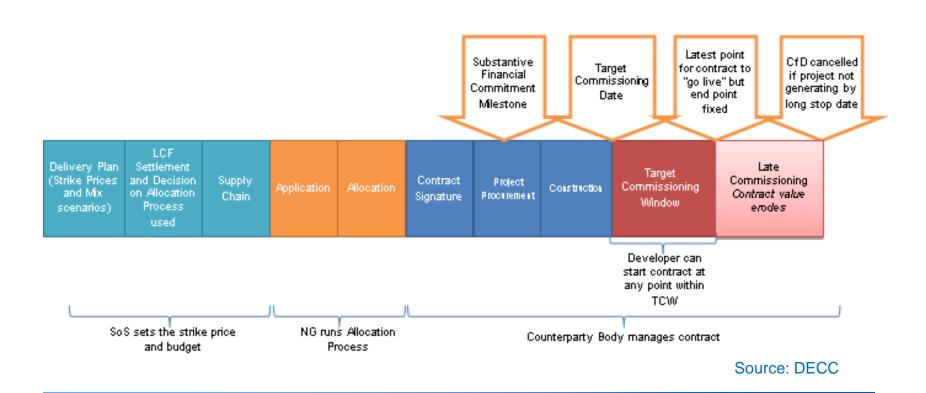
- Strike Price: Estimate of the cost of investing in each technology
- Reference Price: Measure of the average price of electricity



Source: DECC

Stages of CFD process

Key feature of a CFD is that it is allocated **early in the project development life-cycle** → CFD process reflects this.



Roles and Responsibilities under the CFD scheme

DECC

- 1. Sets policy and terms of the CFD contract and varies terms for contracts issued in future.
- 2. Sets out eligibility and qualification criteria that applicants must meet and is responsible for supply chain plan approvals.
- 3. Sets auction rules and details process in Allocation Framework and anounces Allocation Round.
- 4. Provides CFD budget information for participants.
- 5. Has ability to intervene following the audit report and determine whether to proceed with, re-run or terminate an allocation round.
- 6. May award CFDs outside the generic allocation process.
- 7. Is sole shareholder of the Low Carbon Contracts Company, reviews and approves its operational budget.
- 8. Sets operational costs levy rate for Low Carbon Contracts Company.

National Grid (EMR Delivery Body)

- 1. Assesses the eligibility of applications for generic CFDs and notifies applicants of eligibility determination.
- 2. Values all applications and assesses whether an auction process is required to decide which applicants should be offered a CFD.
- 3. Runs the CFD allocation process.
- 4. Provides the Low Carbon Contracts Company with the information necessary to offer a CFD.
- 5. Conducts analysis to support Government's setting of administrative strike prices.
- 6. Reports value of applications to DECC.
- 7. Determines disputes regarding CFD eligibility (Tier 1 disputes).

Ofgem

- 1. Ensures that the Delivery Body carries out its duties efficiently, cost effectively and in a timely fashion.
- 2. Determines disputes regarding CFD eligibility (Tier 2 disputes).
- 3. Is the body to which suspected market collusion is reported.

Low Carbon Contracts Company

- 1. Considers requests for Minor and necessary modifications.
- 2. Signs CFD contracts with projects allocated by Delivery Body and Government.
- 3. Manages and monitors contracts including Investment Contracts transferred from DECC in line with terms.
- 4. Forecasts CFD Payments and fixes Supplier Obligation interim rate and reserve amounts on a quarterly basis.
- 5. Provides accountability, governance and control of the monies collected and disbursed under the CFD Supplier Obligation Regulations.

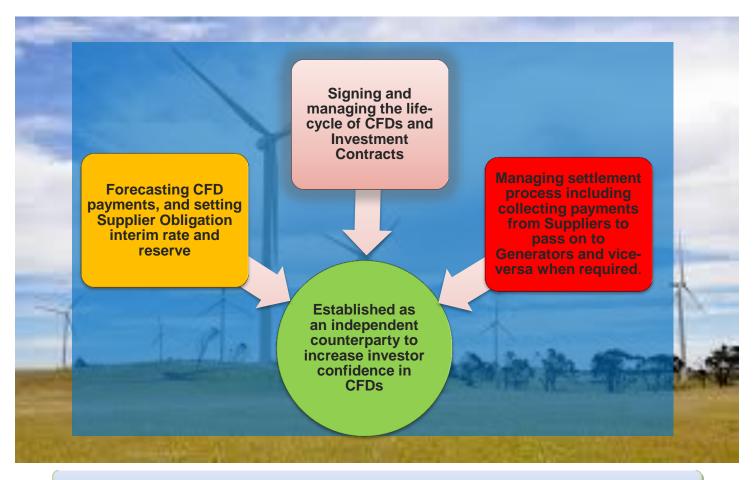
EMR Settlement Ltd (Settlement Services Provider)

- 1. Collects payments to/from suppliers and generators.
- 2. Collects and holds collateral from suppliers.
- 3. Mutualises unpaid payments.
- 4. Holds and manages reserve funds and credit cover payments.

Other Outsourced Delivery

Such as meter verification and fuel monitoring.

CFD Counterparty role



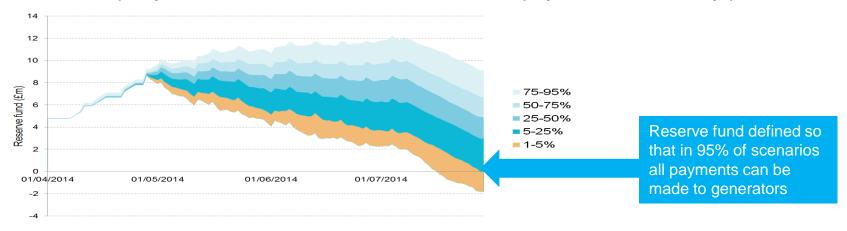
LCCC's Guiding Principle is to maintain investor confidence in the CFD scheme and minimise costs to consumers

CFD Supplier Obligation

- Must be paid by all licensed electricity suppliers in Great Britain from 1 April 2015
- Suppliers will make pre-payments consisting of unit cost fixed rate, charged as a £/MWh rate on a daily basis, and lump sum 'reserve' payments at the start of each levy period for each quarter.

$$SO \ Levy_{(£/MWh)} = \frac{Total \ Payments \ to \ Generators_{(£)}}{Total \ Demand_{(MWh)}}$$

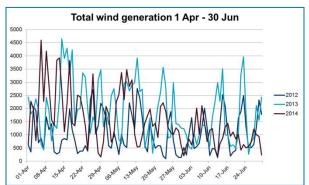
 Regulations require that the total reserve amount must be sized to give the Counterparty 95% confidence that it can make all payments in that levy period.

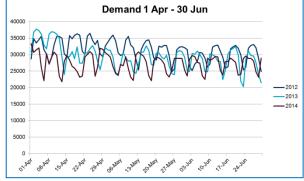


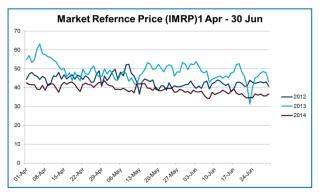
Forecasting CFD payments

- Interim Levy Rate (£/MWh) is set 3 months in advance
- Key variables can change considerably from the time of forecast to when realised.

$$SO\ Levy_{(£/MWh)} = \frac{(StrikePrice_{(£/MWh)} - MarketReferencePrice_{(£/MWh)}) * Generation_{(MWh)}}{Total\ Demand_{(MWh)}}$$







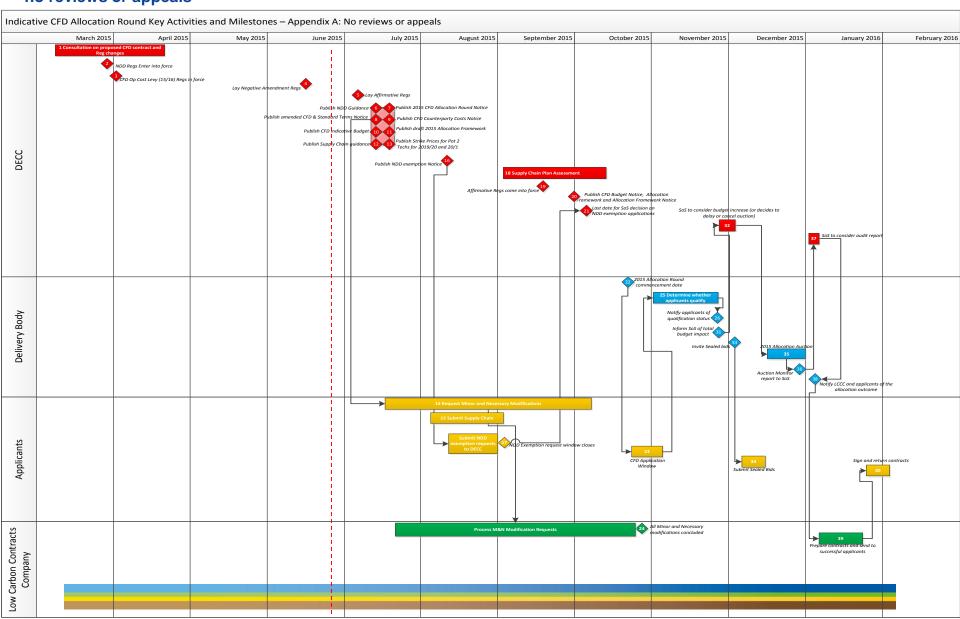
LCCC uses its Supplier Obligation Forecasting Model (SOFM) to set the interim
rate and size of reserve payments and a Transparency Tool to explain our
calculations to suppliers.

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Indicative 2015 Allocation Round Timeline

- no reviews or appeals



Milestones – next 3 months [1]

Milestone / Activity	Indicative date	Responsible
Lay Negative Amendment Regulations	15/06/2015	DECC
Lay Affirmative Amendment Regulations deemed necessary following the CFD consultation (alongside Govt response to CFD consultation)	06 July 2015	DECC
Publish Non Delivery Disincentive Guidance	July 2015	DECC
Publish 2015 CFD Allocation Round Notice, Amended CFD, Standard Terms Notice & CFD Counterparty Costs Notice	July 2015	DECC
Publication of 2015 Indicative CFD Budget and Strike Prices for Pot 2 Technologies for 2019-21	July 2015	DECC
Publication of 2015 Supply Chain guidance	July 2015	DECC
Publication of draft 2015 Allocation Framework Allocation rules	July 2015	DECC

Please note these timings are indicative only and are subject to Government and Parliamentary process. Low Carbon Contracts Company will endeavour to provide any updates to milestones in a timely manner.

Milestones – next 3 months [2]

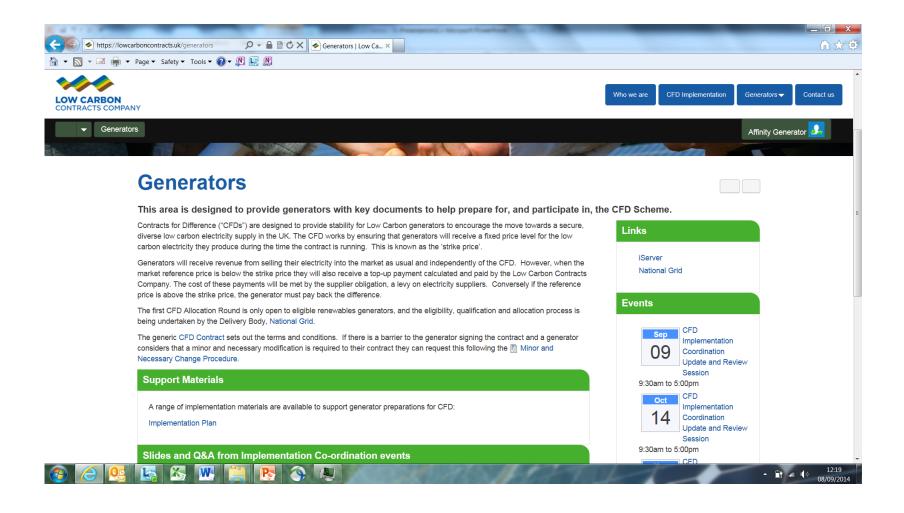
Milestone / Activity	Indicative date	Responsible
Applicants to request Minor and Necessary Modifications	July - 7 October	Applicants
Applicants submit Supply Chain Plans	04 August - 1 September	Applicants
Publish exemption request notice, if required (Non Delivery Disincentive)	11 August	DECC
Closing date for requests for an exemption under Non Delivery Disincentive Regulations	01 September	Applicants
Supply Chain Plan assessment	2 September - 13 October	DECC
Affirmative Amendment Regulations come into Force (subject to Parliamentary process)	18 September	DECC
Publication of CFD Budget Notice, the Allocation Framework and the Allocation Framework notice	End September/ Early October	DECC
Last date for Secretary of State decision on Non Delivery Disincentive exemption	06 October	DECC
2015 Allocation Round commencement date	21 October 2015	Delivery Body

Please note these timings are indicative only and are subject to Government and Parliamentary process. Low Carbon Contracts Company will endeavour to provide any updates to milestones in a timely manner.

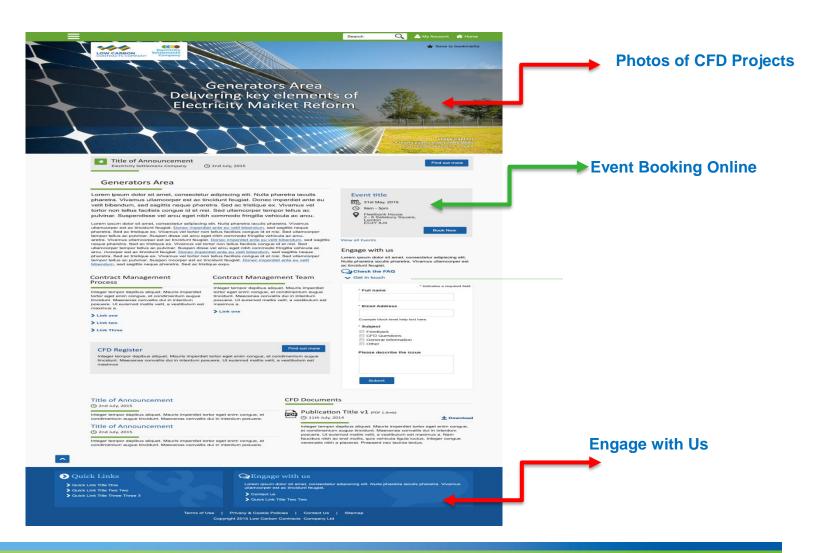
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Current website



New website is coming soon...



To find out more information from the EMR Delivery Bodies...

...on EMR and the CFDs LCCC manages, visit the LCCC website

<u>www.lowcarboncontracts.uk</u> or <u>www.cfd.lowcarboncontracts.uk</u> for the CFD Register

- ...on EMR allocation and auction processes visit: <u>http://www.emrdeliverybody.com/</u>
- ...on EMR settlement services, visit our settlement agent EMRS's website

www.emrsettlement.co.uk









The CFD Contract

Nic Rigby
Puk Lykke-Moller
18 June 2015

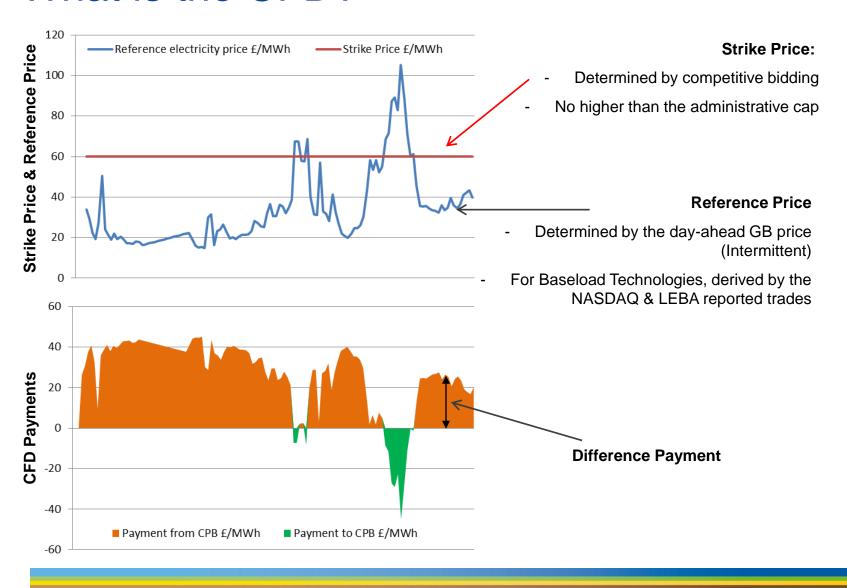
Disclaimer

- Parties should rely upon the drafting of the relevant CFD
 Agreement and FiT CFD Standard Terms and Conditions in
 relation to the contract they enter into, not these slides
- Parties are recommended to obtain their own Legal advice on any issues of interpretation or Contract queries.

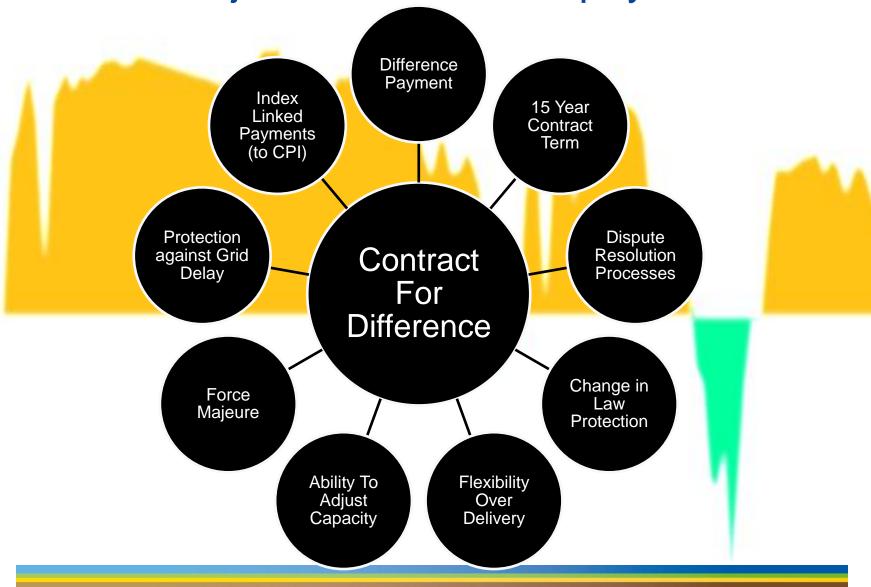
Agenda

- 1. What is the CFD
- 2. 2014 allocation recap
- 3. Minor and Necessary
- 4. How is the Contract Managed

What is the CFD?



More than just the difference payment



Benefits to developers of the CFD

- Removal of wholesale electricity price exposure by providing a fixed strike price to developers, largely stabilising project revenue
- Robust and reliable private law contractual arrangement providing developers with a clear set of rights and obligations, and recourse to arbitration processes to resolve disputes
- Robust single counterparty owned by government and set up as a limited liability company
- Post CFD, certainty and security of support levels in the project development process
- Provisions that protect the value of the CFD to developers (e.g. change in law protection)



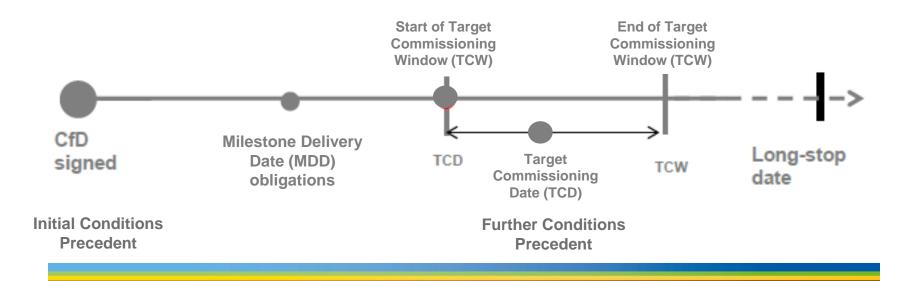
What about the obligations?

Delivery obligations

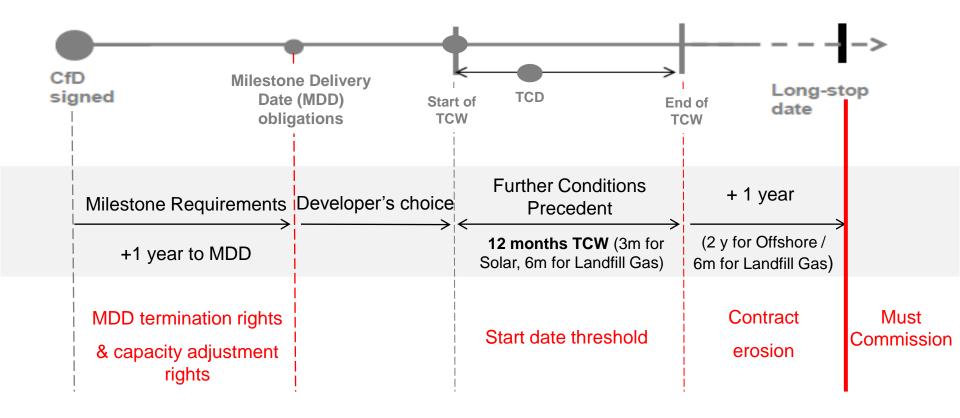
Defined by the CfD Agreement and CfD Terms & Conditions – available on our website

Key milestones:

- Initial Conditions Precedent mainly administrative
- Milestone Delivery Date obligations evidence of commitment; 10% spent or entered into contracts with suppliers and finance providers
- Further Conditions Precedent commissioning and operational requirements

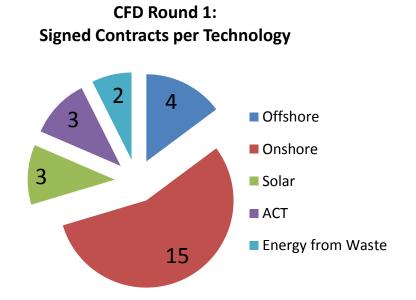


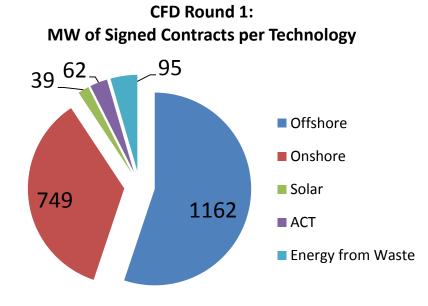
Delivery obligations



2014/15 Round 1: Recap

- 29 contracts were offered & 27 were signed
- Offshore Wind, Onshore Wind, Energy from Waste, ACT and Solar PV represented in the mix
- Thus industry appetite is clear





2014/15 Round 1: Recap

- Successful Initial Conditions Precedent process with lessons learned
- On their way to meet their Milestone Requirements by the Milestone Delivery Date
- 2 of the Investment Contracts (earlier form of CFD) successfully met their Milestone Requirements on time earlier this year – others scheduled to follow later this year or early 2016
- So it does work!



Minor & Necessary process

The Contract and your Project

- The Contract has been designed to cover a wide range of eventualities
- Standard contracts deliver fairness, good understanding, robust and consistent delivery
- You need to check how your project will fit with the Standard Terms

The Contracts for Difference (Standard Terms) – Part 3, gives the option for the Counterparty (the Low Carbon Contracts Company) to agree to "Minor & Necessary modifications". These need to be agreed prior to the allocation of contracts.

How to apply for Minor and Necessary

- Applications for Minor and Necessary modifications can be made after an allocation round notice has been published (currently planned for July 2015)
- Must be applied for 'promptly' and no later than 20 working days before end of Application Closing Date
- Minor & Necessary modification requests should be submitted to the Low Carbon Contracts Company
- Generators should use the template form (will be published on our web-site)
- Guidance on requesting modifications will be published once the allocation round is announced
- Please note that applications will need to be signed by a Director
- The Low Carbon Contracts Company must respond no later than 5 working days before Application Closing Date

Information to be provided

- Short description of the requested modification
- Proposed change(s) to legal wording of Clause(s) in CFD Agreement
- Explanation of why you consider the change to be allowed under the Regulations (why is it minor? and why is it necessary?)
- Additional supporting information
- Directors statement and signature

Issues

- A requested change must be both Minor and Necessary
- If we don't have enough information
- If we don't have enough time

Useful documents

- The Contracts for Difference (Standard Terms) Regulations Part 3 describe Minor & Necessary changes (http://www.legislation.gov.uk/uksi/2014/2012/part/3/made)
- Guidance on Minor & Necessary Modification Requests, to be published on our website. Will include the template form to be used
- Contract for Difference Standard Terms and Conditions; 2015 revised version to be published by DECC
- CFD Agreement relevant to your project (Generic, Phased, Private Wires); 2015 revised versions to be published by DECC

The 2014 CFD agreement and Standard Terms and Conditions documents can be found via: https://lowcarboncontracts.uk/ in the Generator area, CFD contract



How is the Contract managed?

In practice – Working with you

- You will have a dedicated and experienced Contract Manager. You will be informed about who is your Contract Manager as soon as possible after you get notified of the allocation of a CFD.
- Each Contract Manager covers all the projects that are operated by a Company or Group.



Nic Rigby



Arezou Farhadi



James Krzyszkowski



Puk Lykke-Moller



Stephanie Houston



Leo Papanikolaou

General Approach

- LCCC treat all parties equally
- Use of web site to post
 - standardised documentation (Contract Notices)
 - guidelines (KYC, Milestone Requirements)
- Feedback always welcome
 - Topics covered in future events
 - Material available on web site
- NOTE: We will not provide Contract explanation and applicants need to access legal advice

Generator's Role

- Engage early with Low Carbon Contracts Company and let your Contract
 Manager know as early as possible of any issues
 - Confidentiality maintained by limiting to one person
- Prepare a mitigation plan
- Discuss with Low Carbon Contracts Company and then implement the plan
- Extra costs are better than breach of the CFD

Our focus

Minor & Necessary

Contract signature

Initial Conditions Precedent

Milestone Requirement Further Conditions Precedent

Start of Generation

Closing Remarks

- The CFD is a private law contract
- Both parties must meet the contract obligations
- Stretching the requirement can't be done equitably
- No allowances as not fair on those who meet the contract obligations

Contact us:

Website www.lowcarboncontracts.uk

Email: contractmanagement@lowcarboncontracts.uk

Break 10.40am – 10.55am









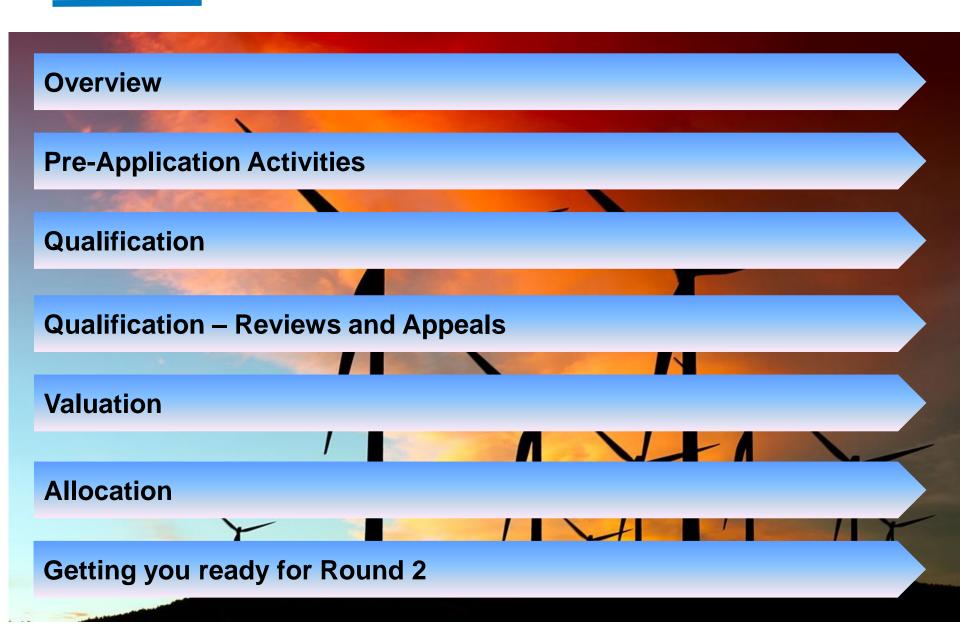
Overview of CFD Allocation Process

Yasharn Smith
Paul Mullen
18 June 2015



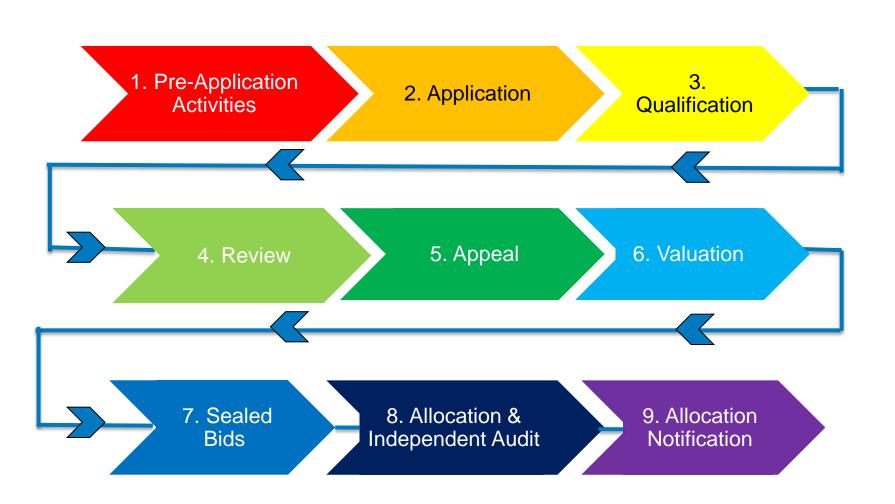
Yasharn Smith and Paul Mullen

national**grid**





CfD Process – End to End





Paul Mullen EMR Delivery Manager

national**grid**

6. Valuatio

7. Seale

8. Allocation & Independent Audit

9. Allocation Notification

Applicants

>=300MW submit Supply Chain Plan Non Delivery Disincentive exemption applications submission

Minor & necessary change requests

Registration Requests



Supply Chain Plan Assessment

Non Delivery Disincentive exemption applications assessment

Allocation Framework, Allocation Round Notice & Budget Notices

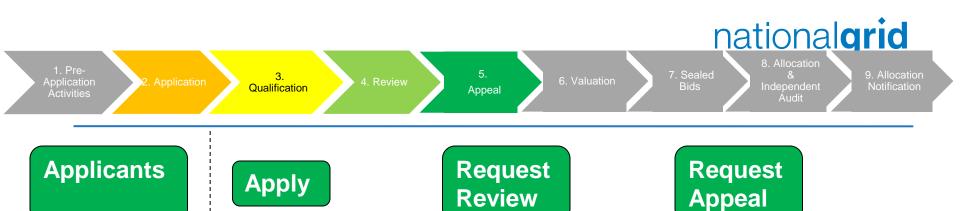
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Training, Production of User Guides and Round Guidelines

Process Registration Requests



Minor & necessary change process



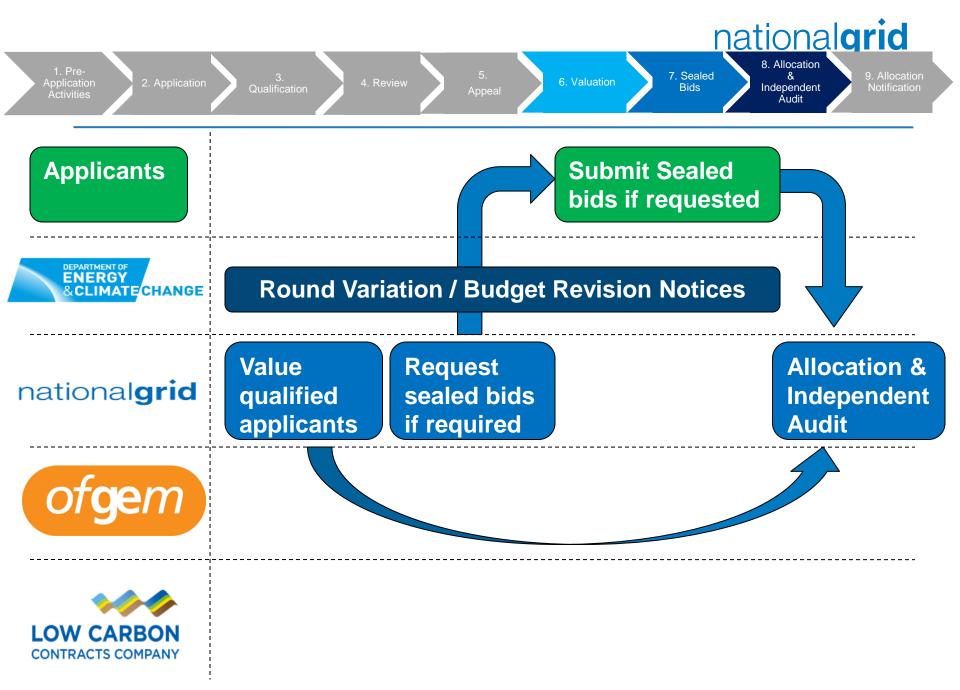


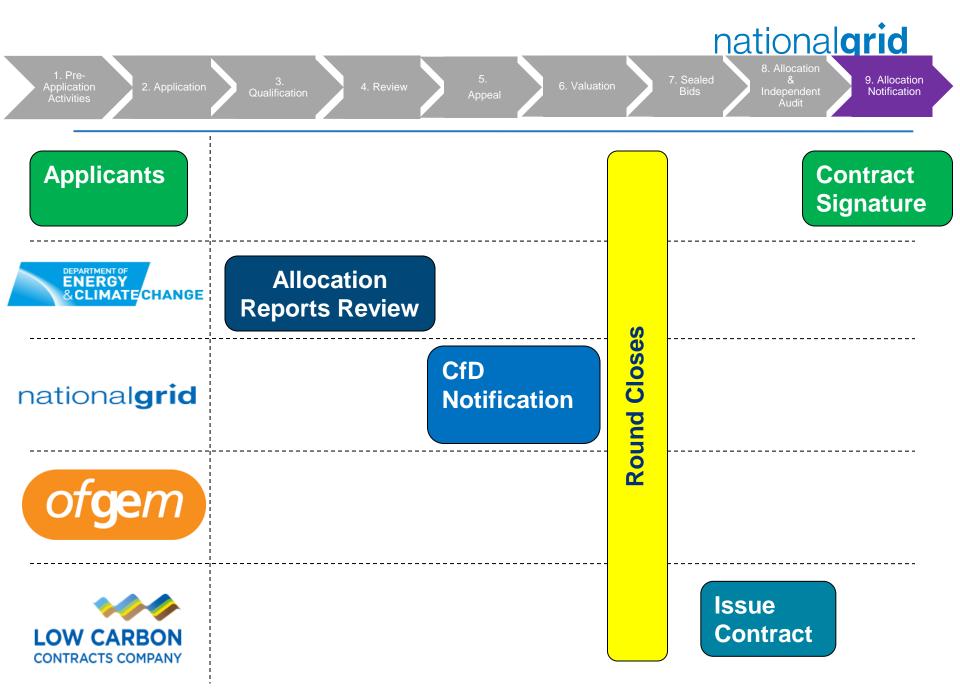
Assess nationalgrid **Eligibility** Review

Qualifying Applicants RO Check Appeal



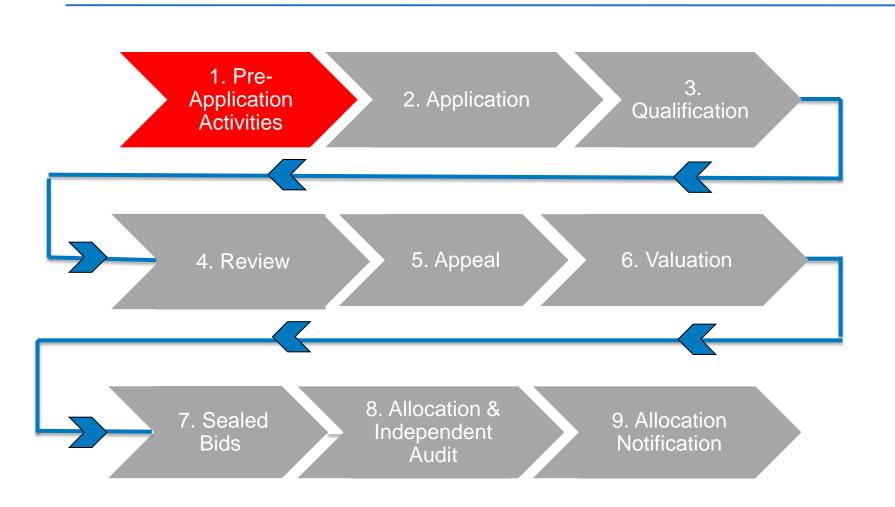
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CfD Process - End to End

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Registration – High Level Principles

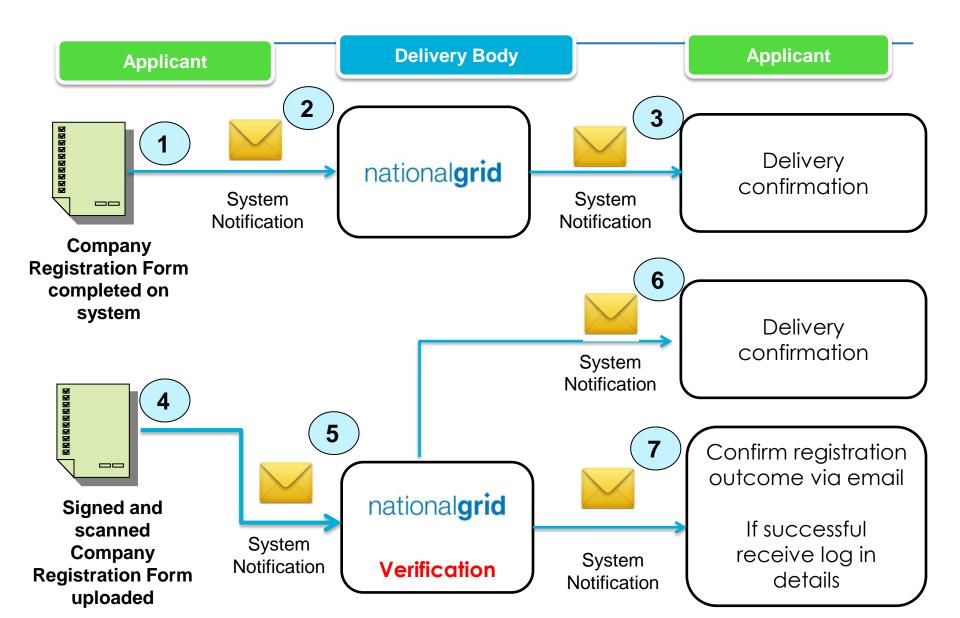
All Companies that wish to participate in the Contracts for Difference will need to register

Necessary to ensure a publically recognised officer of the company has approved the registration

Other "company users" of the Portal may be added by the main company administrator user(s) ("Main Admin")

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Registration – Process

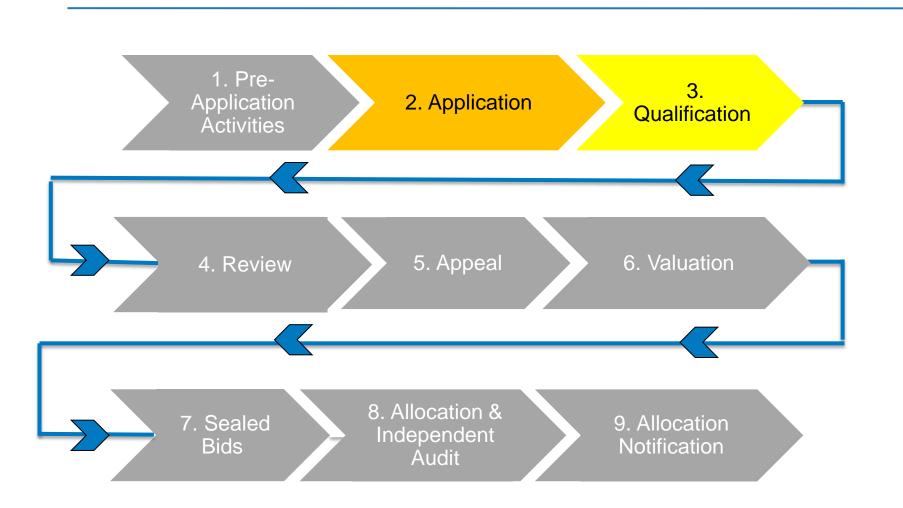




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CfD Process - End to End





CfD Qualification

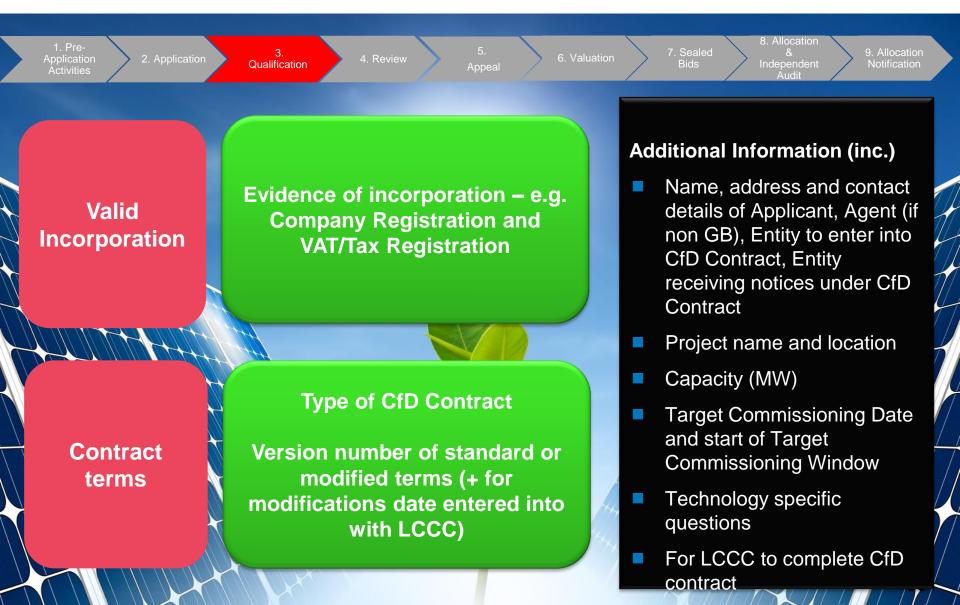




CfD Qualification – Eligibility Requirements



CfD Qualification – Other Information/Data

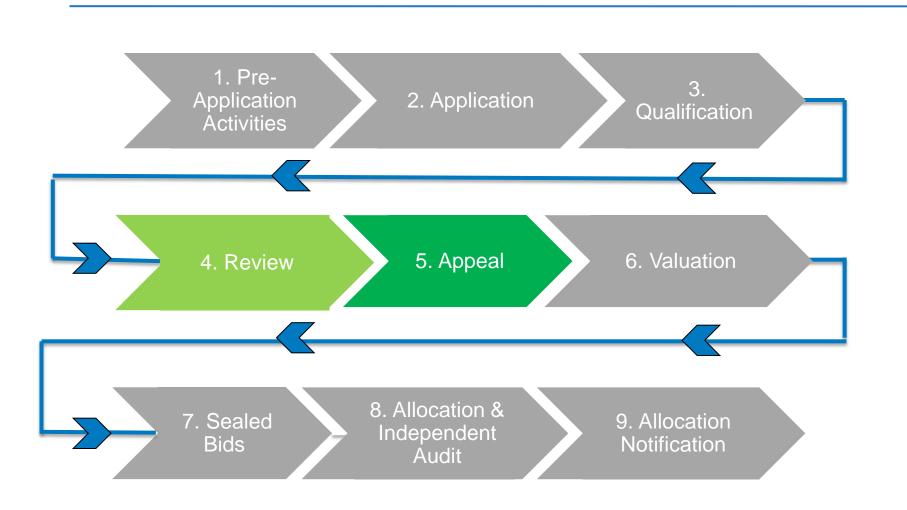




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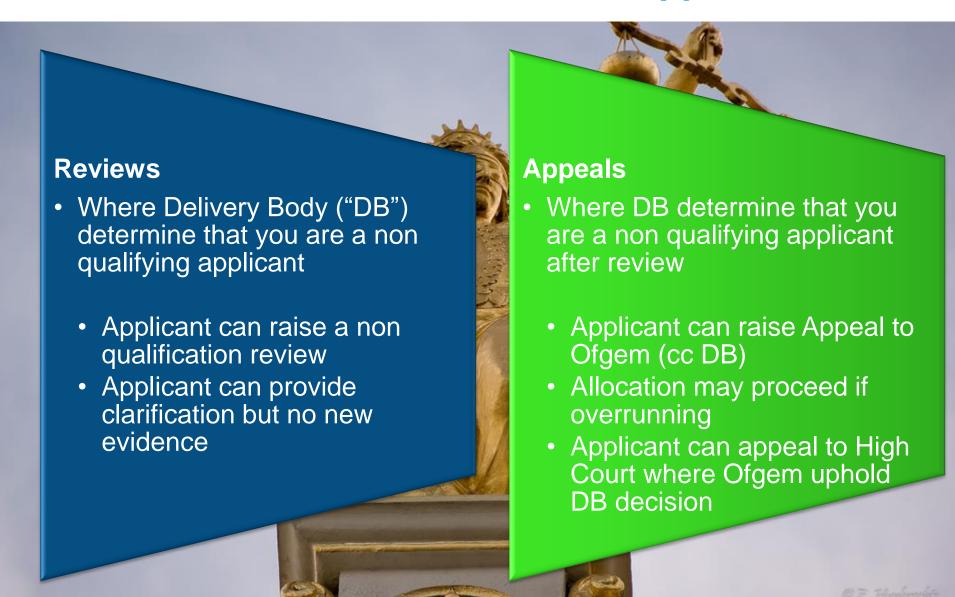
CfD Process – End to End





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CfD Qualification – Reviews and Appeals



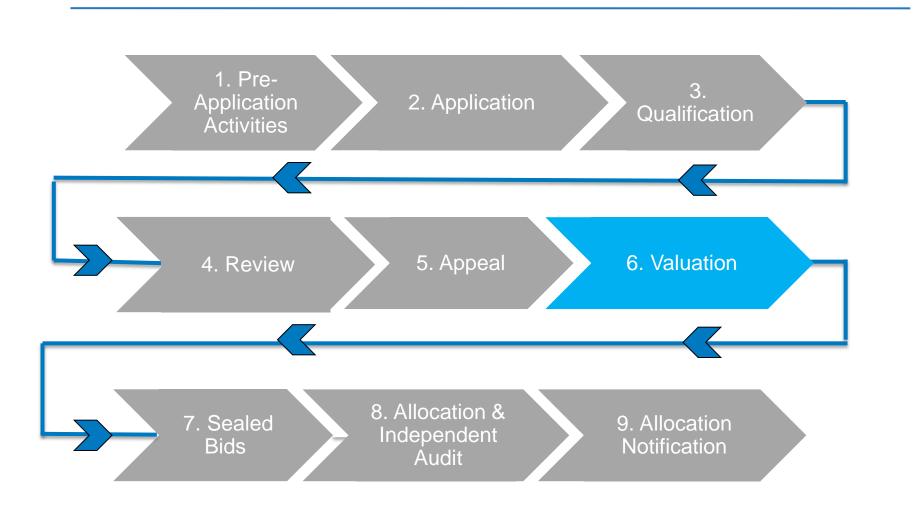


Yasharn Smith EMR Delivery Manager

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CfD Process – End to End





Valuation Formula





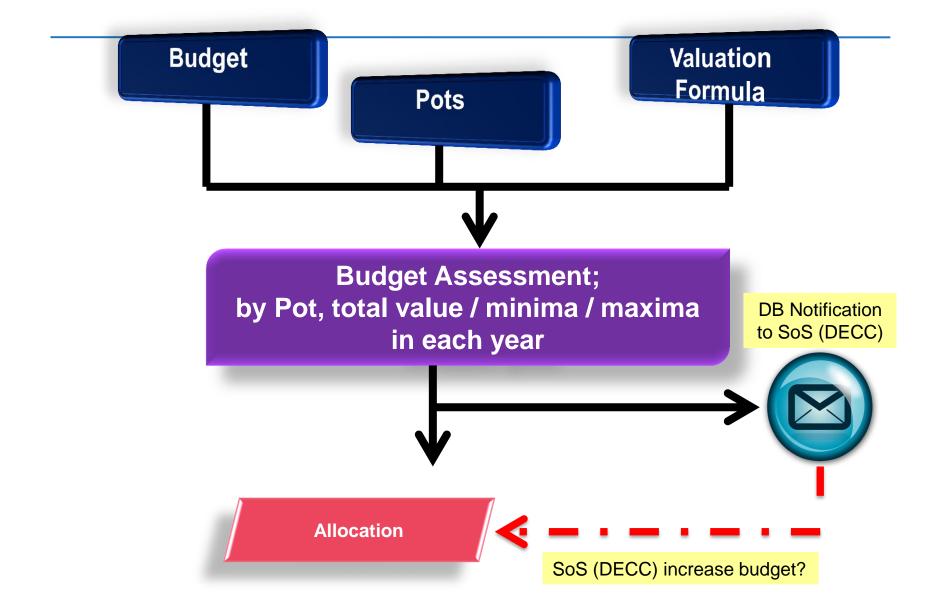
Strike Price minus Reference Price

- e.g. Transmission losses, hours to days.
- Set out in Allocation Framework
- e.g. Load factors
- Set out in Allocation Framework

Provided by Applicant

CfD Valuation

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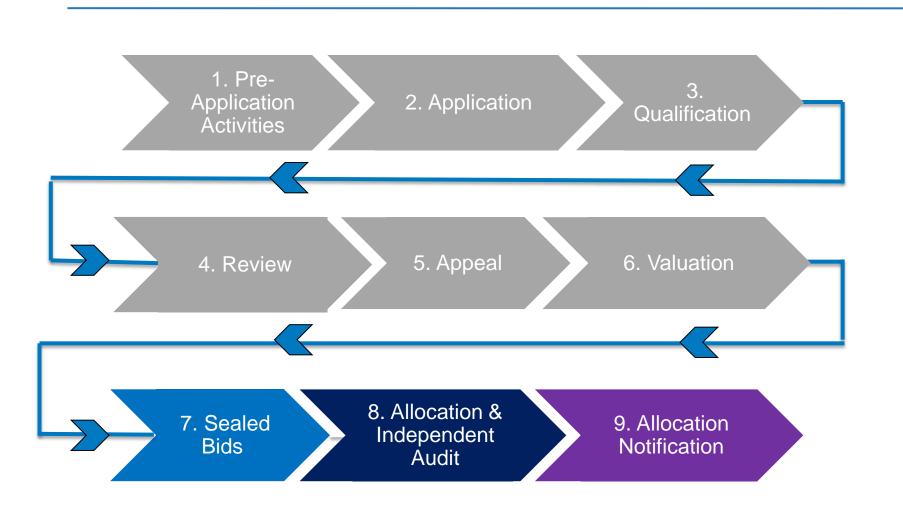




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CfD Process - End to End





CfD Allocation – Process Overview

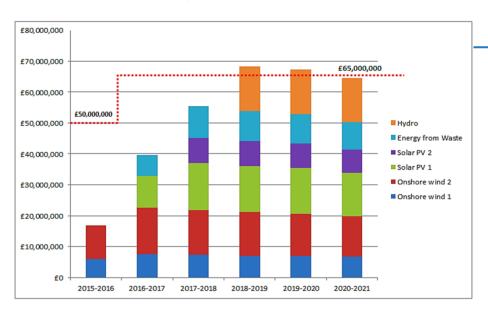


 Check if Auction is required. If yes, applicants notified to submit Sealed bids Run Unconstrained/Constrained allocation Independent Audit of DB Calculations Step 3 SoS reviews; Proceed, Re-run or Cancel Allocation Process. Step 4 DB CfD Notifications : (LCCC & Applicants) Step 5

When is an Auction Required

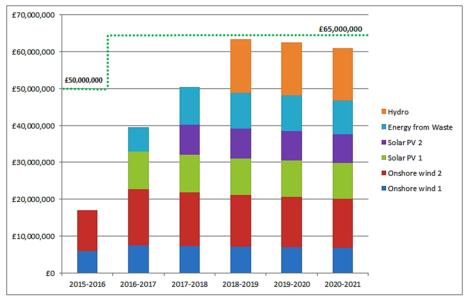
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Illustration only





AUCTION REQUIRED





NO AUCTION REQUIRED

CfD Allocation - General Principles nationalgrid

Budget Rule

Pot /Budget (Cannot Be Exceeded Except for Pending Projects)

Constraint

 Only competitive where binding constraint (E.g. MIN capacity/MAX capacity/Pot Budget)

Across Years

- All projects in same Pot will compete on strike price basis, regardless of delivery year.
- Years can close independently

Bids/ Prices

- Projects will be awarded in order of lowest to highest strike price
- Sealed bid process (includes bidder flexibility)

Pay as Cleared

 Clearing Price set by most expensive successful project in each year (subject to cap at the Technology Admin Strike price).



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Getting you ready for Round 2

At future events we will cover..

- Registration Demo and details on Application and Qualification process
- Specific details on Valuation and Allocation Rules
- Overview and Demo of Allocation bidding processes

Supporting documents (to be published)

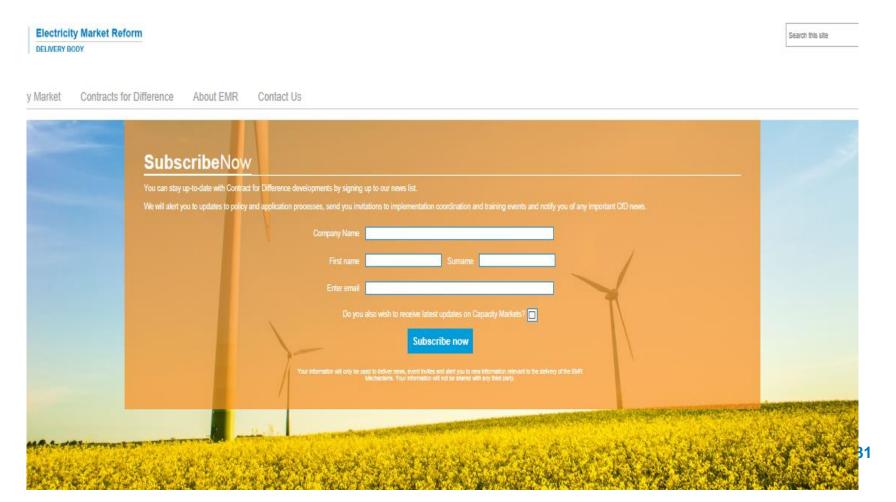
- User Guide
- Round Guidance
- Registration Guide
- Application Form Guide
- Sealed Bid Guide
- Webinars



Get the latest CfD Information

■ Subscribe to the new National Grid EMR Portal

(Please renew your subscription even if you were registered on the previous Portal)



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Contact us



Stakeholder Engagement Session

Rita Congera 18 June 2015

Working Together

Collaborate

Engage

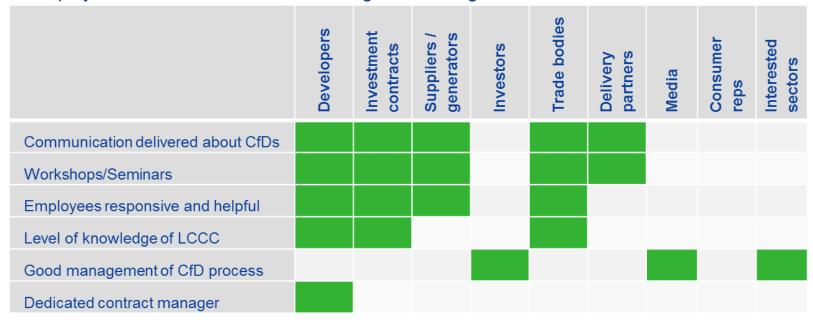
Feedback



Perception Study for the Low Carbon Contracts Company

Key Statistics

- LCCC conducted a snapshot stakeholder analysis in the Spring of 2015
- We surveyed a wide range of stakeholder groups
- Positive feedback but we are on a learning curve
- Strong need for Delivery Bodies to identify who is responsible for what...
- Employees seen as 'excellent', 'knowledgeable' and 'great to work with'



NB The above table draws together a number of similar opinions within and across stakeholder groups.

Plenary session: Summary and close

Please give us your feedback!

Please return your badge on your way out. Thank you for attending today