

Under the Hammer

Assessing the Impact of CfD Auctions on UK Offshore Wind



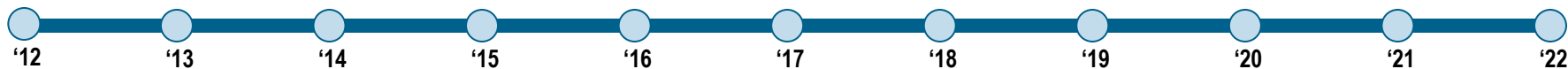
Technical by nature





Context: Is competitive CfD allocation likely?

Reminder of EMR timetable



Renewables Obligation

Administrative Price Setting

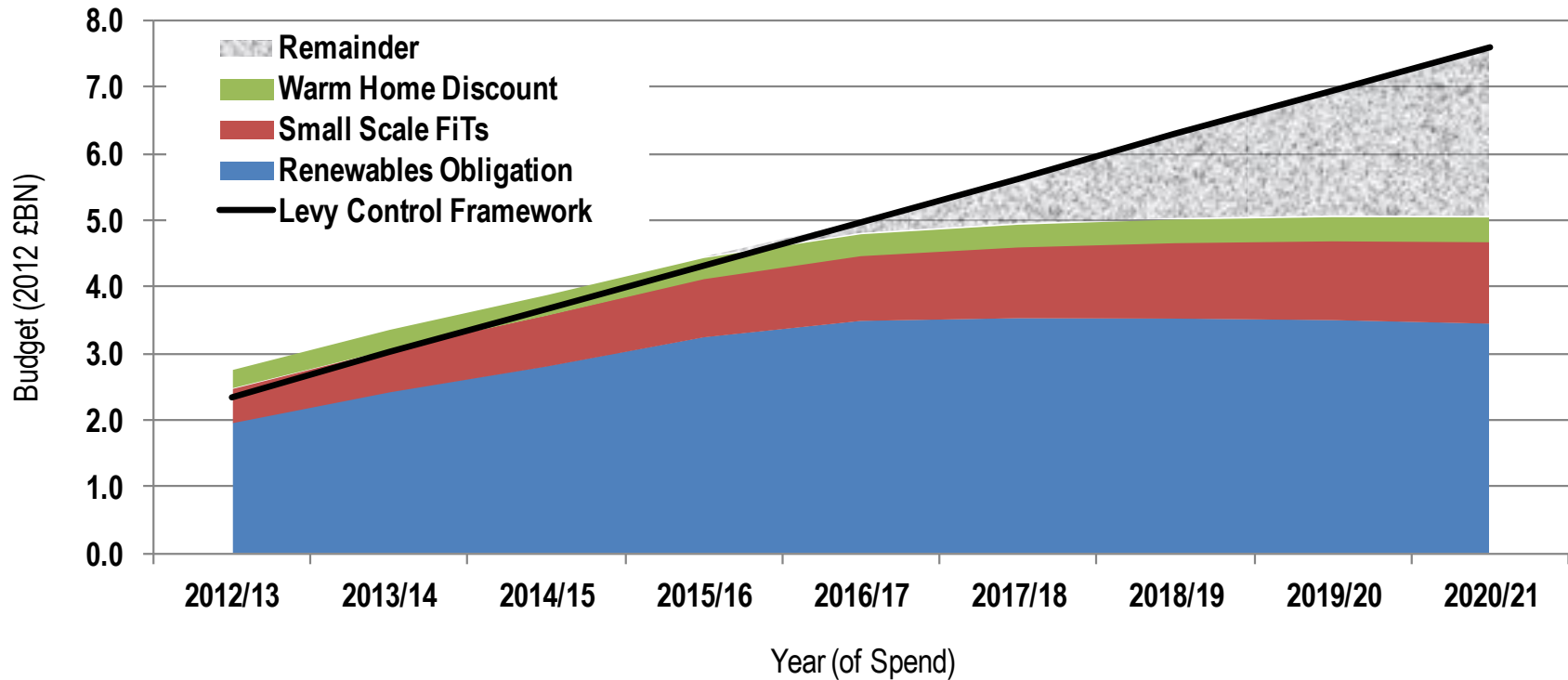
“Allocation Rounds” if LCF trigger thresholds are breached

Competitive Price Discovery

Heading for a competitive process, perhaps sooner than we thought

Context: Is competitive CfD allocation likely?

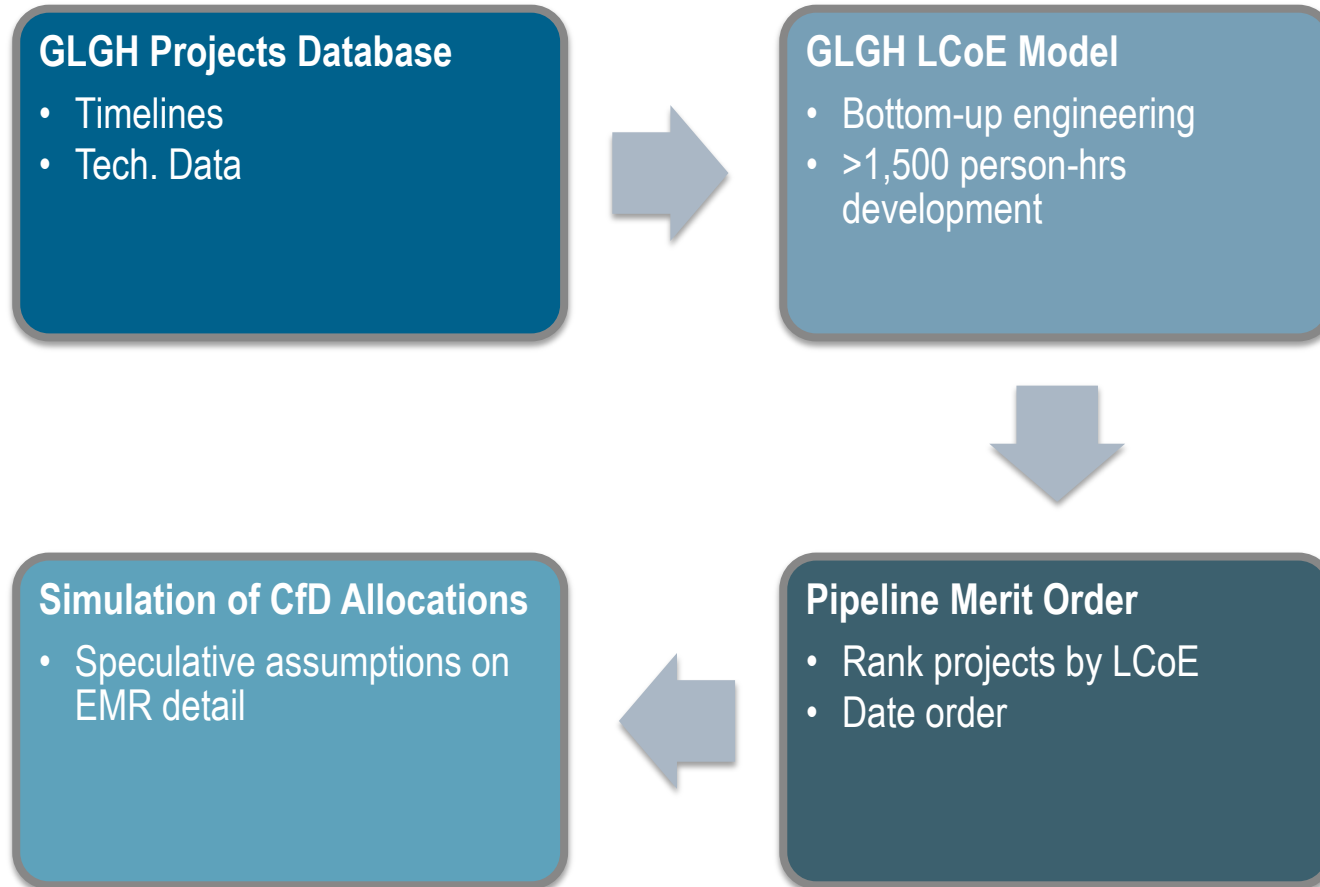
How big will the CfD pot be?



Conclusion: CfD pot doesn't look all that big...

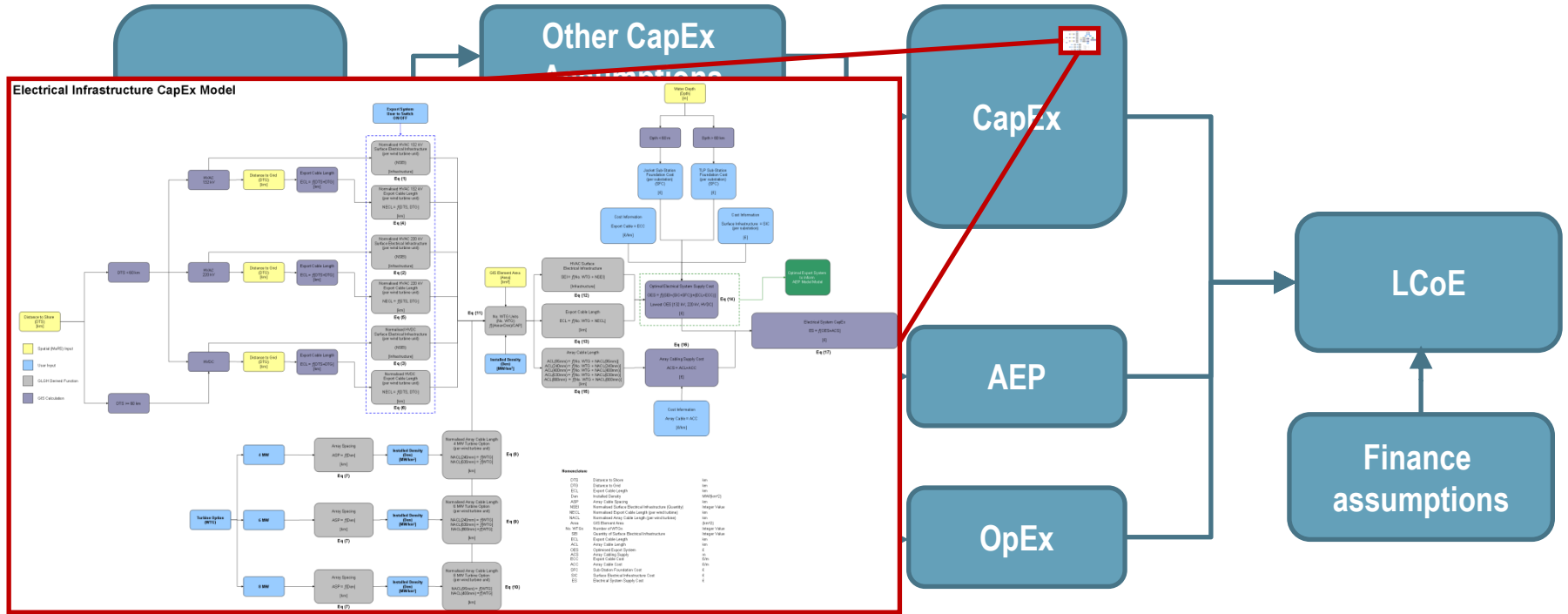
Methodology

Overview



Methodology

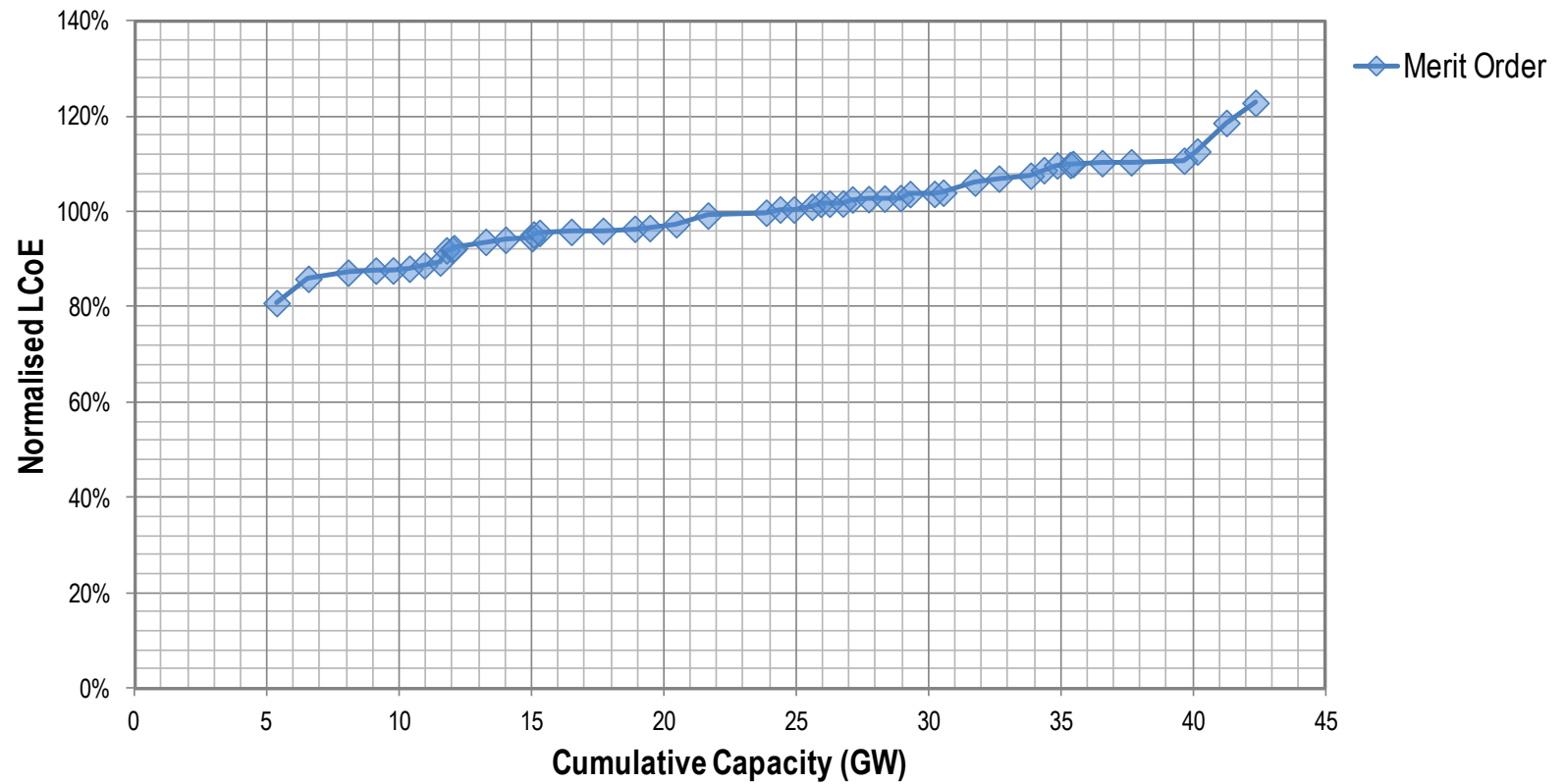
GLGH LCoE Model



A robust and validated modelling approach – but it's still a model....

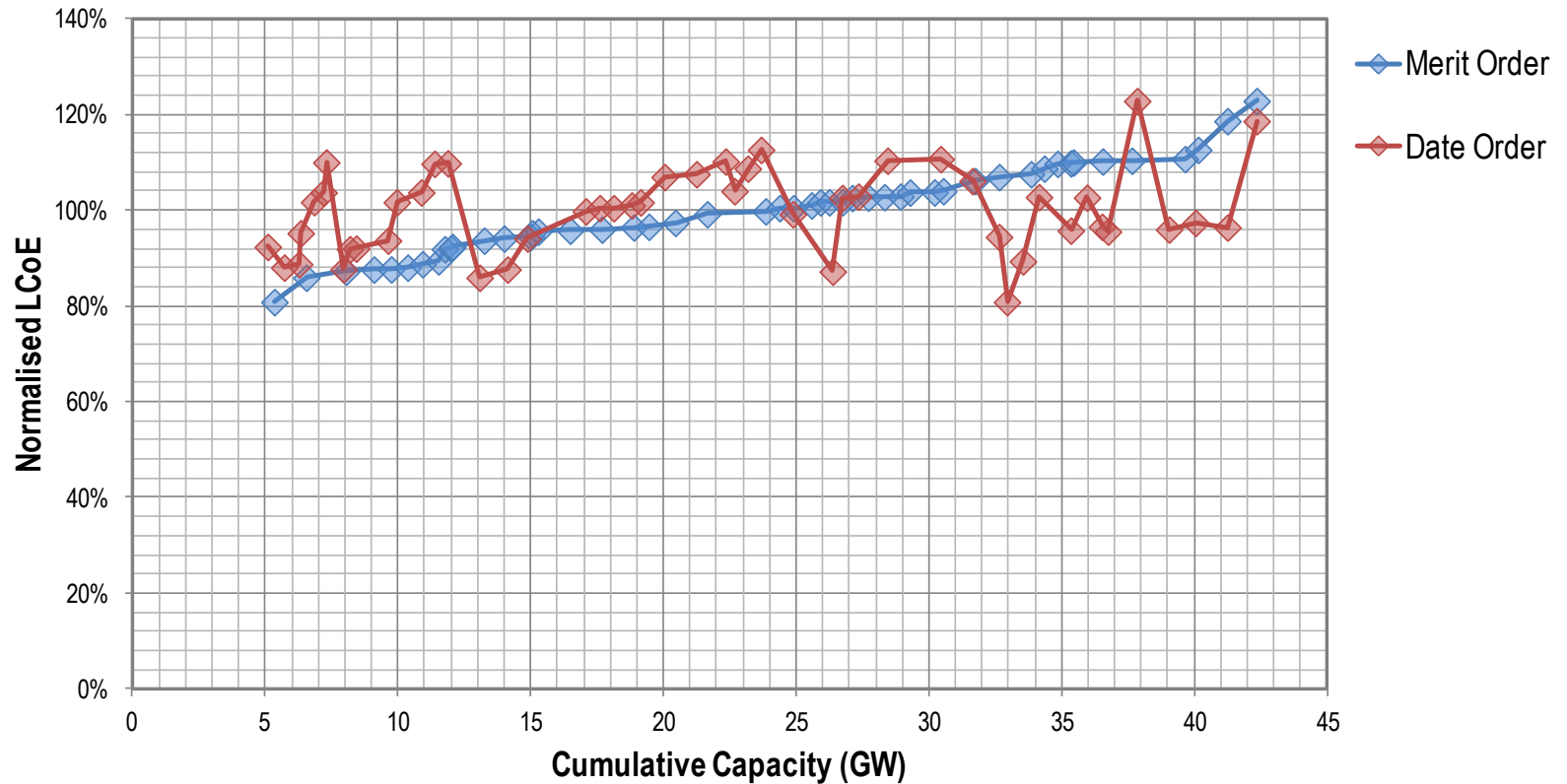
LCoE

The Merit Order



LCoE

Date Order



Real life is noisy

Simulating Allocation Rounds

Warning: conjecture and speculation follows...

Key Assumptions *(aka imagination)*

- LCF trigger hit – 1 Allocation Round per year 2014-2017
- No new nukes or CCS in timeframe of interest
- Av. Brown Power reference price: £50/MWh
- Residual funds from each Round go into next Round's pot

Scenario A: Unconstrained allocation *(aka hopelessly optimistic)*

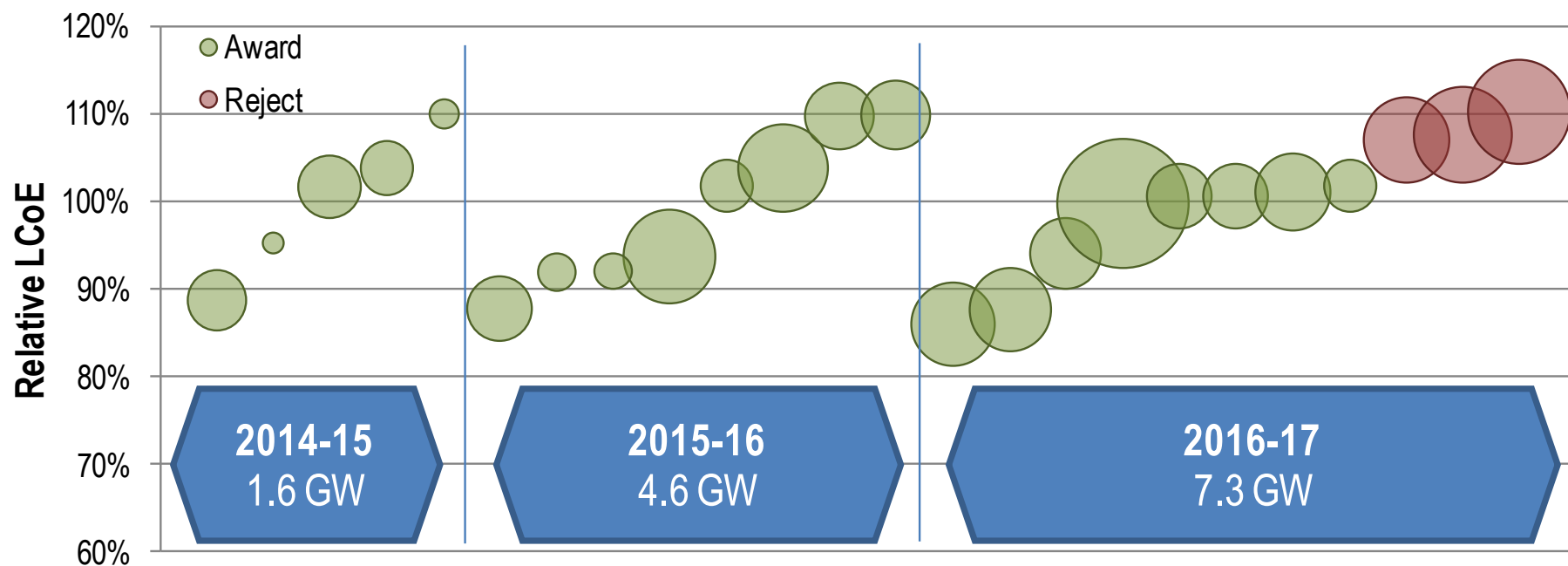
- Offshore wind has exclusive access to CfD pot

Scenario B: Technology ring-fencing *(aka remorselessly credible)*

- 35% of CfD pot ring-fenced for offshore wind

Scenario A

Unconstrained allocation



24 projects approaching FID in 2014-17, totalling 16.6GW

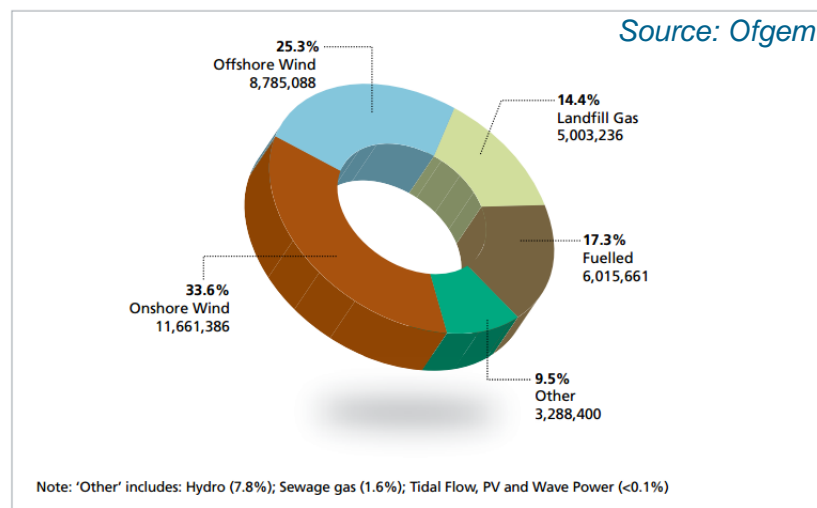
Using all of the CfD pot, offshore wind will hit 18GW by 2020

Only 3 projects rejected (88% success rate)

Simulating Allocation Rounds

Scenario B: how big might the ring fence be?

Figure 9: Total ROCs issued in the UK by generation technology in 2011-12

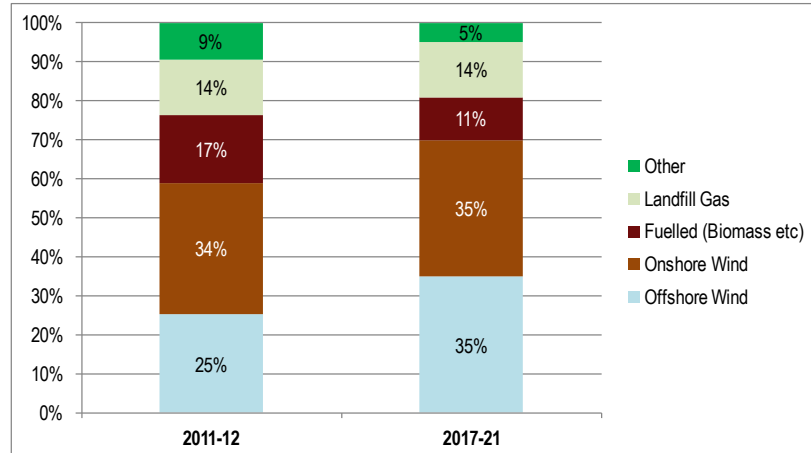


Assume...

- Offshore wind grows a little faster than onshore
- No increase in landfill gas proportion
- Biomass etc (fuelled) - slower deployment than wind
- No new large hydro

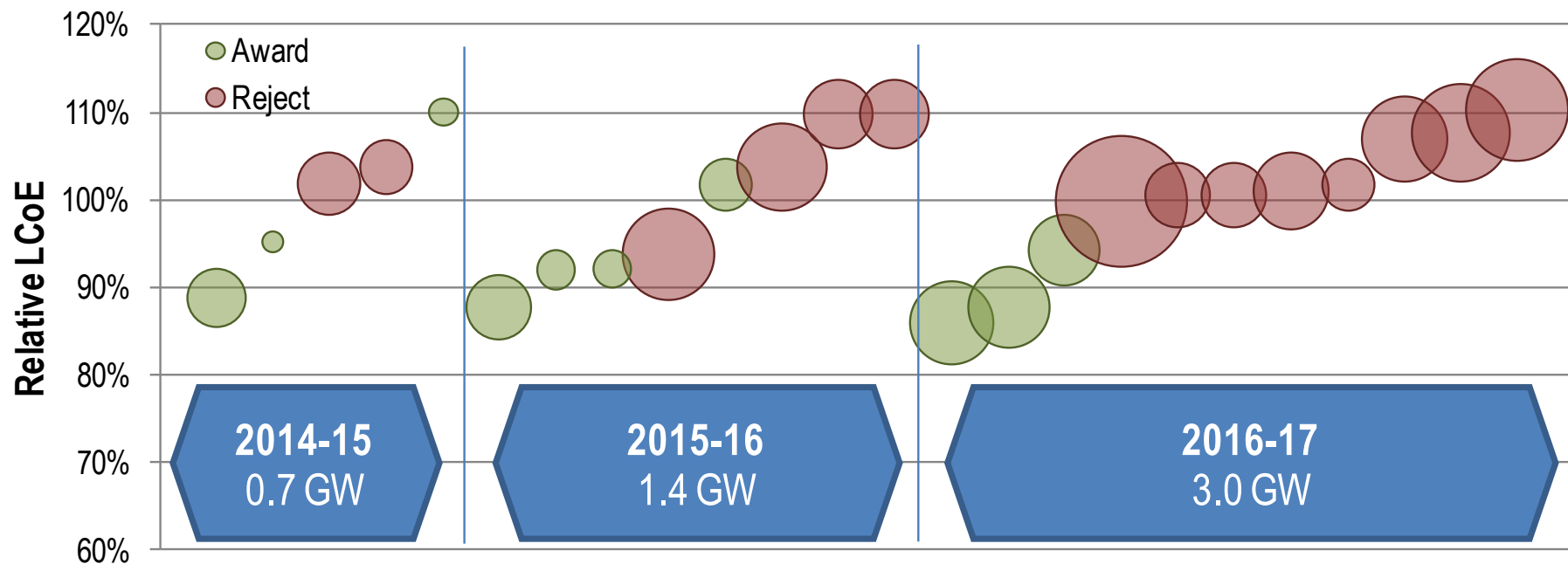
Result...

- Up to 35% of CfD pot for offshore wind seems reasonable for (spend) period 2017-2021
- If anything, slightly optimistic for offshore wind



Scenario B

Technology ring fencing



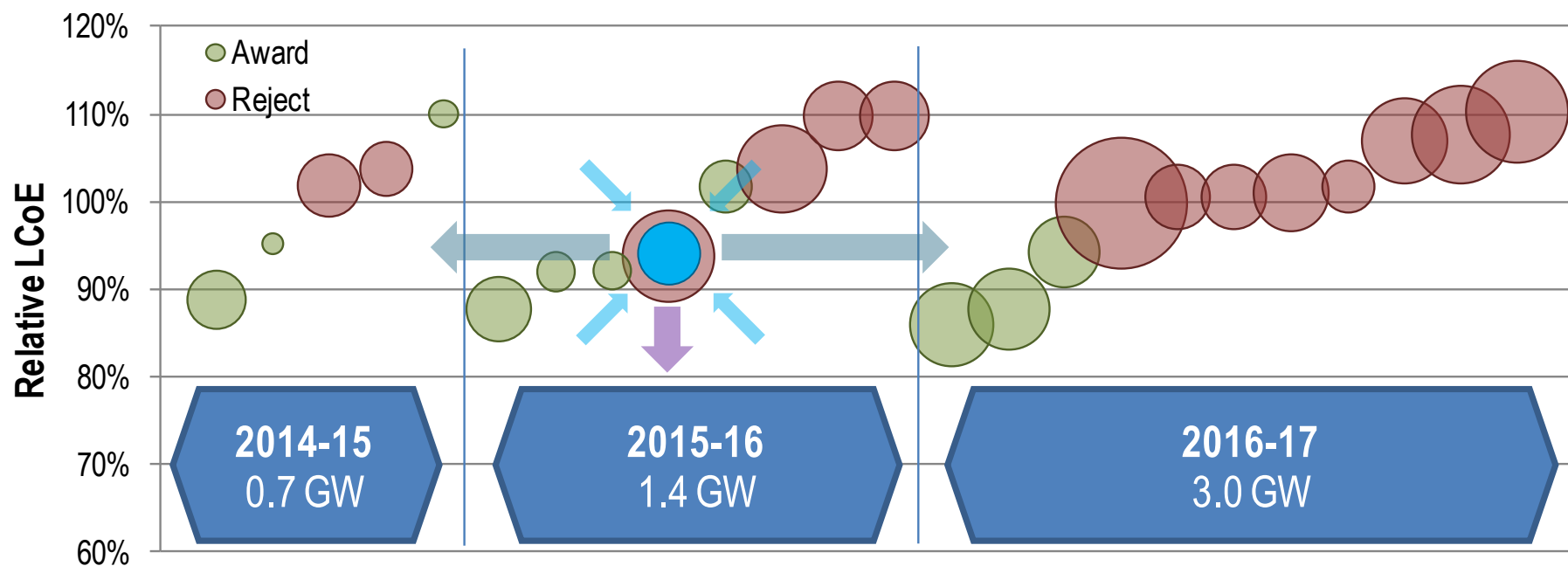
Limiting offshore wind to 35% of the CfD pot yields ~11GW by 2020

Success rate down at 42%

Small can be beautiful

Strategic options

How will this hypothetical storm affect developer behaviour now?



Stretch to compete (drive down LCoE)

Perfect timing (shift programme to less competitive round)

Go on a diet (trim capacity to mop up pot residual)

Concluding remarks

Dawning reality: CfDs will be rationed.

Competitive pressure = lean industry?

Intelligence needed (both senses of the word).

Knowledge is power

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