AR8: A Different Kind of Auction

What makes AR8 different and what this means for the CfD auction

September 2026

LCP Delta

Executive Summary

Allocation Round 8 (AR8) represents a fundamental shift in the way CfD auctions are assessed and cleared. Unlike previous rounds, Government is expected to place far greater emphasis on consumer value and cross-pot optimisation, rather than simply allocating a fixed budget to procure renewable capacity.

Using project-level intelligence from EnergyPulse and SolarPulse, combined with LCP Delta research and LCP Delta's EnVision modelling platform, we have simulated AR8 auction outcomes to give participants the best chance of success.

Our analysis finds that DESNZ's new value for money assessment means:

- AR8 could procure up to 19GW of renewable generation across offshore wind, onshore wind and solar PV when auction pots are optimised on a system-wide basis.
- Renewable capacity procured through AR8 could deliver more than £11 billion of savings for consumers by 2050.
- Depending on the scenario considered, strike prices in the range of £68-£92/MWh across solar, onshore wind and offshore wind can meet the Government's value-for-money assessment.
- Value-for-money outcomes are highly sensitive to assumptions. Government and market participants should therefore test a range of plausible futures rather than relying on a single scenario.

Technology	Strike Price in central scenario	Strike Price maximising consumer benefit under high / low scenario[1]	Capacity expected to clear, GW (Central scenario)
Solar PV	**£68/MWh**	*See full report*	*See full report*
Onshore Wind	**£86/MWh**	*See full report*	*See full report*
Fixed-bottom Offshore Wind	**£92/MWh**	**£91-96/MWh[2]**	**6**
Floating or deep-water offshore wind	**£206/MWh**	*not applicable*	*See full report*

The full report, including detailed strike price and capacity analysis across all auction pots, is available to LCP Delta clients here.

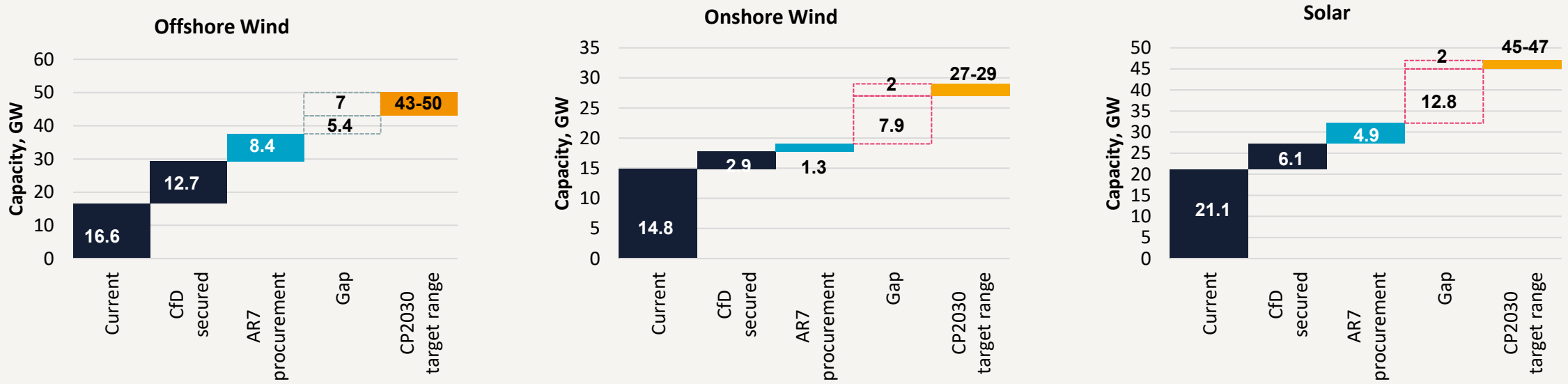
For access and further information, contact Bertalan.Gyenes@lcp.com

The government has introduced key changes to AR8

A successful AR8 is essential in the push for CP2030

With the previous auction successfully contracting a record amount of renewable generation capacity, AR8 is an opportunity to procure further capacity to hit government targets and reduce bills for consumers

Current and CfD secured capacity for renewables compared to CP2030 target range



- Reaching Clean Power 2030 capacity targets set out by government requires a significant increase in renewable capacity from today's levels.
- Previous CfD auctions have procured much of the capacity needed to reach those targets but there are still gaps across all three technologies to reach the CP2030 capacity range. Offshore wind* requires 5-12GW, onshore wind 8-10GW and solar 13-15GW of additional capacity.
- AR8 is a major auction to deliver additional capacity to reach the target. For offshore wind, AR8 is the last chance to procure additional capacity for 2030 while for onshore wind and solar it is likely to be the penultimate auction.
- However, AR8 is being conducted against a backdrop of changing priorities for the government. Recent increases in gas prices have bought consumer bills back to the forefront. This means that the government will aim to ensure that the 'right' amount of capacity is procured at the 'right' strike price to reduce bills for consumers.

*Note that not all the offshore wind procured in AR7 will deliver by 2030 given CfD projects are delivered in phases, so the gap is likely to be bigger than this in reality

Strike price and capacity determination is fundamentally different from AR7 due to DESNZ changes

Previous approach

Pre-set budget

DESNZ set budgets ahead of seeing the supply curves with limited flexibility for adjustment. Budgets were intended to procure a given amount of capacity.

AR8 approach

1. **Consumer value:** Greater emphasis on consumer costs and value for money, rather than nominal policy cost alone.
2. **Budget flexibility:** Government may increase pot budgets where unsuccessful projects represent strong value for money. The initial budget is therefore a starting point, not necessarily the final limit.
3. **Cross-pot assessment:** Lower-cost projects in one technology pot may affect procurement in other pots. For the first time, each of the four major established technology (solar, onshore wind, fixed-bottom offshore wind and floating offshore wind) are placed in their own pot.
4. **Separate clearing prices:** The possibility of separate clearing prices based on various criteria, including project size and location, creates additional uncertainty but DESNZ is minded to limit this to just locations this year, the same approach as what we saw last year.
5. **Wider eligibility:** Solar and onshore wind receive an additional delivery year, increasing the potentially eligible pipeline.

Crucially, the precise way that DESNZ and HM Treasury combine consumer cost assumptions, background scenarios and technology objectives will determine where the auction clears across the four pots.

Building the pipeline of eligible projects to understand the auction dynamics

Project level data sources and first-class modelling give granularity and rigour to developing the supply curves

Competitor analysis

Consumer-cost metric and auction results

1. Eligible pipeline

Eligible project database developed for each auction pot using proprietary EnergyPulse and SolarPulse datasets, providing project-level intelligence on renewable assets across Great Britain. LCP Delta supplements this with research on technology, location and other factors influencing bidding behaviour, identifying eligible projects and constructing a supply curve.

2. Revenue modelling and cost research

Project-level revenue modelling using LCP Delta EnVision to estimate location-specific load factors and merchant tail revenues.

Project-level cost research and modelling drawing on EnergyPulse project data, public cost reports and LCP Delta's proprietary cost modelling including TNUoS cost forecasts, capex and hurdle rates.

3. Financial modelling

Identify the CfD strike price necessary for each eligible project to reach the required IRR depending on revenues and costs to arrive at the supply curve for each CfD pot.

4. Auction simulation

Auction simulation using a value-for-money assessment based on the DESNZ stated objectives of lower consumer costs. Co-optimise across pots to identify likely clearing-price ranges and awarded capacity based on multiple scenarios.

This is a marked change in the required approach compared to previous auctions.

Project economics and consumer-cost metric jointly determine auction clearing depending on modelling choices

Project economics, financing conditions and pipeline depth drive different supply curve movements across technology pots

Solar PV

Strong global equipment availability and lower module costs reduce capex.
Higher risk-free rates and connection reform uncertainty offset part of the benefit through higher hurdle rates, particularly for larger schemes.
A significant volume of new entries across Great Britain keep the pipeline healthy and competitive.

Key Message: The supply curve moves slightly lower overall and remains deep and competitive, with the lowest cost order sensitive to revenue and load factor.

Onshore wind

Average global capex is broadly unchanged from AR7, but higher risk-free rates and connection reform risk have raised hurdle rates. The eligible pipeline is tight relative to potential demand, reinforced by limited development in England and Wales.

Key Message: The curve has shifted moderately upward. Tight supply and the technology's system value keep onshore wind well-placed in AR8.

Fixed-bottom offshore wind

Average capex is broadly stable versus AR7, with project-level costs having been refreshed. Higher risk-free rates and delayed connection reform lift required returns slightly. Some Scottish assets are aiming for connections further south to reduce TNUoS exposure, although longer export routes can increase OFTO costs. Larger deepwater projects remain in this pot as most are too far along the development pipeline to change.

Key Message: The curve is slightly higher and more segmented, but Pot 3 remains liquid overall.

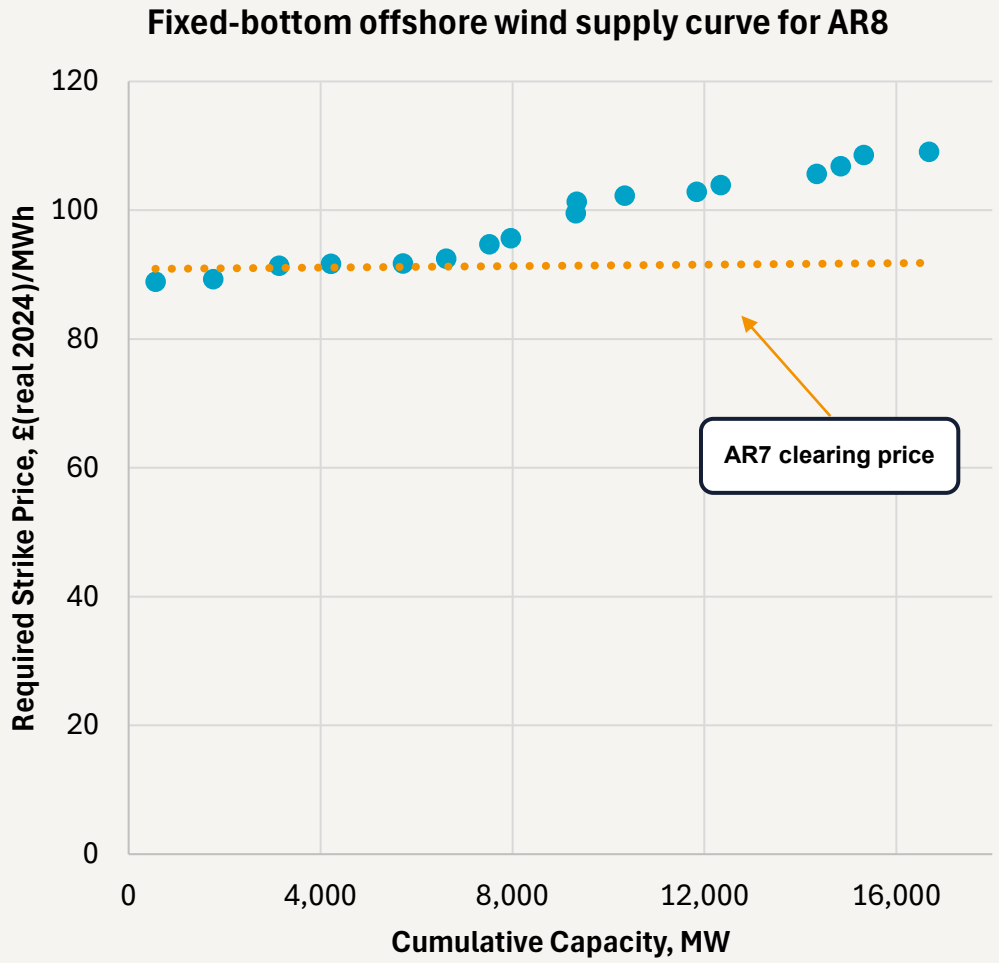
Floating and deepwater offshore wind

Costs remain high, with no material annual reduction assumed. Lower maturity, a smaller eligible pipeline and uncertainty over the final category definition limit near-term competition. Procurement may therefore need a minimum budget or capacity to establish a domestic market and a route to future cost reductions before shallow-water opportunities become more constrained.

Key Message: The curve offers weak near-term consumer value. A policy-led minimum may be needed to support market formation and future cost reduction.

Final supply curves and outcomes remain sensitive to the eligible project list, DESNZ/HMT value-for-money methodology, background scenarios and final auction rules.

Offshore supply curve shows clear segmentation based on location, transmission exposure and engineering choices



- Average capital costs have remained stable since Allocation Round 7 but project-specific costs have been updated to develop the central supply curve. This includes offshore infrastructure costs to be repaid as part of OFTO charges during the lifetime of the wind farm.
- Hurdle rates have slightly increased for eligible offshore wind projects due to two main reasons. First, the risk-free interest rate has increased over the past year due to macroeconomic factors. Second, the ongoing delays in connection reforms create significant additional uncertainty for all renewable assets aiming to connect as part of AR8.
- Scottish plants have higher costs and therefore higher required strike prices, mostly due to higher and less predictable TNUoS that is not counteracted by the higher load factor they experience. While some Scottish projects connect further south to reduce their TNUoS, this increases the costs of their export cables and therefore their OFTO charges.
- Current deepwater projects still plan traditional foundations and therefore no major project is expected to enter Pot 4 under the new Other Deepwater Offshore Wind. This means that Pot 3 will remain liquid.
- Overall, the additional risk faced by offshore wind projects has led to a slight upward shift in the supply curve compared to last year.

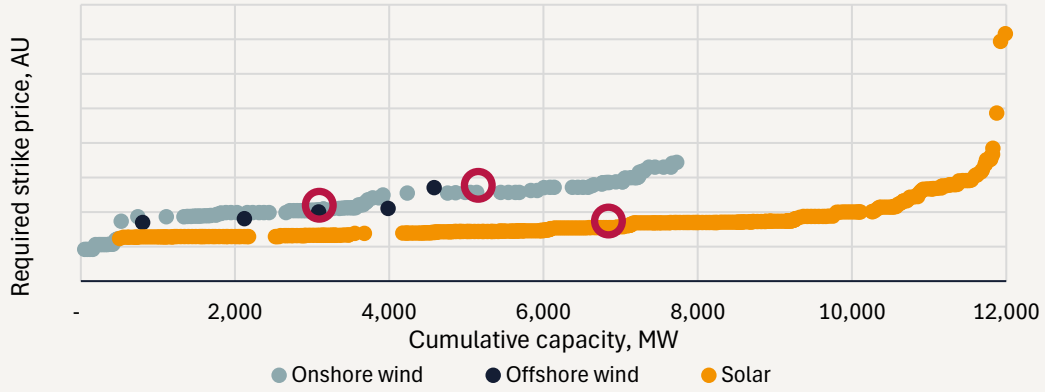
The supply curves for solar, onshore wind and floating offshore wind projects are available as part of LCP Delta's GB Power and Storage subscription research service – contact Bertalan.Gyenes@lcp.com for further detail.

Auction results will depend on both the project economics and the value to consumers

Assessing across all pots to identify the auction outcome that delivers the greatest benefit to consumers

- We have used LCP Envision, our power-market modelling framework, to assess the cross-pot impact on consumer costs and anticipate DESNZ's approach to determining the auction outcome.
- For this, we have assessed consumer costs across many different points on the supply curves for Solar PV, Onshore Wind and Fixed-bottom Offshore Wind to calculate the mix which maximises benefit to consumers across multiple scenarios.
- Given the relatively high costs associated with floating and deepwater offshore wind, we have excluded this technology from the assessment, while recognising that some capacity is still likely to be procured.
- **This analysis enables us to identify the maximum strike price for each technology that would continue to provide value for consumers**.

Example scenario we tested based on illustrative supply curves



LCP Delta consumer cost framework

Wholesale costs

- The cost to consumers of paying generators the wholesale price, based on the total demand in each period.

Balancing costs

- The costs incurred by consumers for actions taken through the balancing mechanism to manage energy imbalances.

Policy Costs

- The payments made to generators as a result of having policy support contracts such as CfDs, ROCs and the Capacity Market.
- Higher CfD strike prices will result in increased policy costs.

Constraint Costs

- The payments made to generators as result of being asked to turn-up or turn-down through the balancing mechanism to manage locational constraints.
- Increased build of generation assets in constrained areas will lead to higher constraint costs being borne by consumers.

Capacity Adequacy

- Cost of maintaining sufficient firm capacity on the system to meet system events and ensure security of supply.

Solar, onshore wind and fixed-bottom offshore wind all demonstrate value for money for consumers at higher prices than AR7 under LCP Delta Central scenario

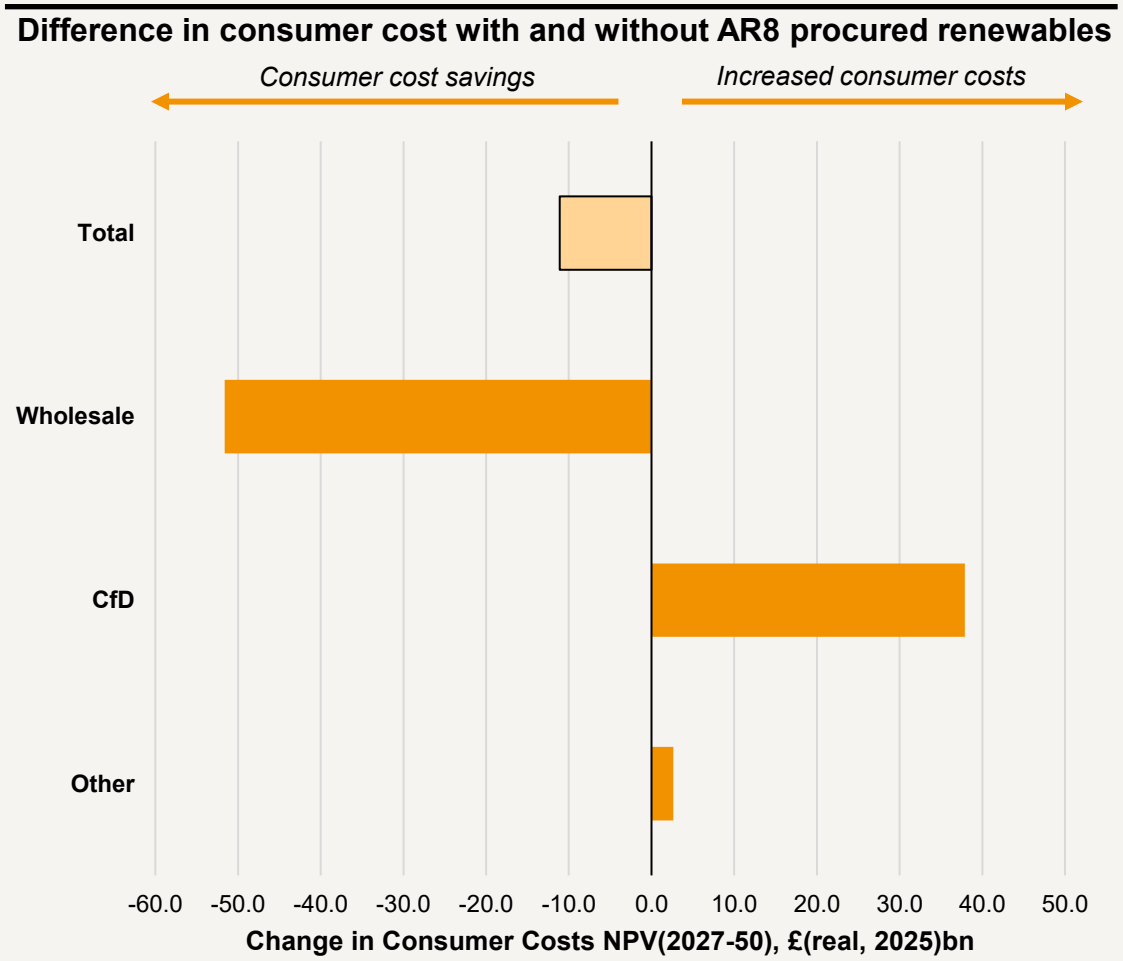
Technology	Strike Price in central scenario[1]	Strike Price maximising consumer benefit under high / low scenario[1]	AR7 Strike Price[1]	Capacity expected to clear, GW (Central scenario)	Description
 **Solar PV**	**£68/MWh**	*See full report*	*65.23*	*See full report*	Solar remains one of the lowest-cost renewable technologies and continues to offer strong value for consumers. We expect a cross-pot assessment to lead to greater solar procurement than in AR7 and for supply chain constraints to be a limiting factor for higher procurement and higher strike price.
Onshore Wind	**£86/MWh**	*See full report*	*72.24*	*See full report*	Onshore wind also offers strong consumer value. Receiving its own pot, as well as the new value-for-money methodology puts it into a better position to achieve higher strike prices and higher procurement in AR8.
 **Fixed-bottom Offshore Wind**	**£92/MWh**	**£91-96/MWh[2]**	*91.2 / 89.49*	**6**	Fixed-bottom offshore wind is expected to achieve a strike price broadly in line with AR7. However, increasing uncertainty is expected to lead to lower capacities, with Scottish projects securing contracts in only some scenarios.
 **Floating or deep-water offshore wind**	**£206/MWh**	*not applicable*	*216.49*	*See full report*	While the high strike price of floating or deep-water offshore water is unlikely to provide value for consumers, it will continue to support development of the technology.

The full report, including detailed strike price and capacity analysis across all auction pots, is available to LCP Delta clients here.
For access and further information, contact Bertalan.Gyenes@lcp.com

1. All prices £(real 2024)/MWh
2. See Scottish value in full report

Renewable generation procured in AR8 could result in over £11bn savings for consumers to 2050

- The new approach in AR8 aims to maximise savings for consumers.
- The chart on the right shows the change in consumer costs relative to a counterfactual scenario in which the renewable capacity procured through AR8 is not deployed.
- AR8 procurement at the proposed strike prices delivers consumer savings from 2027 to 2050 of more than £11 billion. These savings are primarily driven by lower wholesale electricity prices, as additional renewable generation displaces more expensive thermal generation. This reduces wholesale costs by approximately £51 billion.
- These benefits are partly offset by an estimated £38 billion increase in CfD costs, alongside around £2 billion of additional costs associated with balancing and capacity adequacy.
- Overall, increased renewable build out will largely result in a decrease in consumer costs relative to the counterfactual scenario. The strike prices and cleared capacities represent the outcome that delivers the greatest consumer savings within our analysis.
- This result, however, is sensitive to choice of the counterfactual scenario, in particular, the assumptions on timings and costs of future renewable deployment. For example, assuming substantial cheap renewable deployment in the future will reduce the benefit of procuring renewable capacity now under AR8.

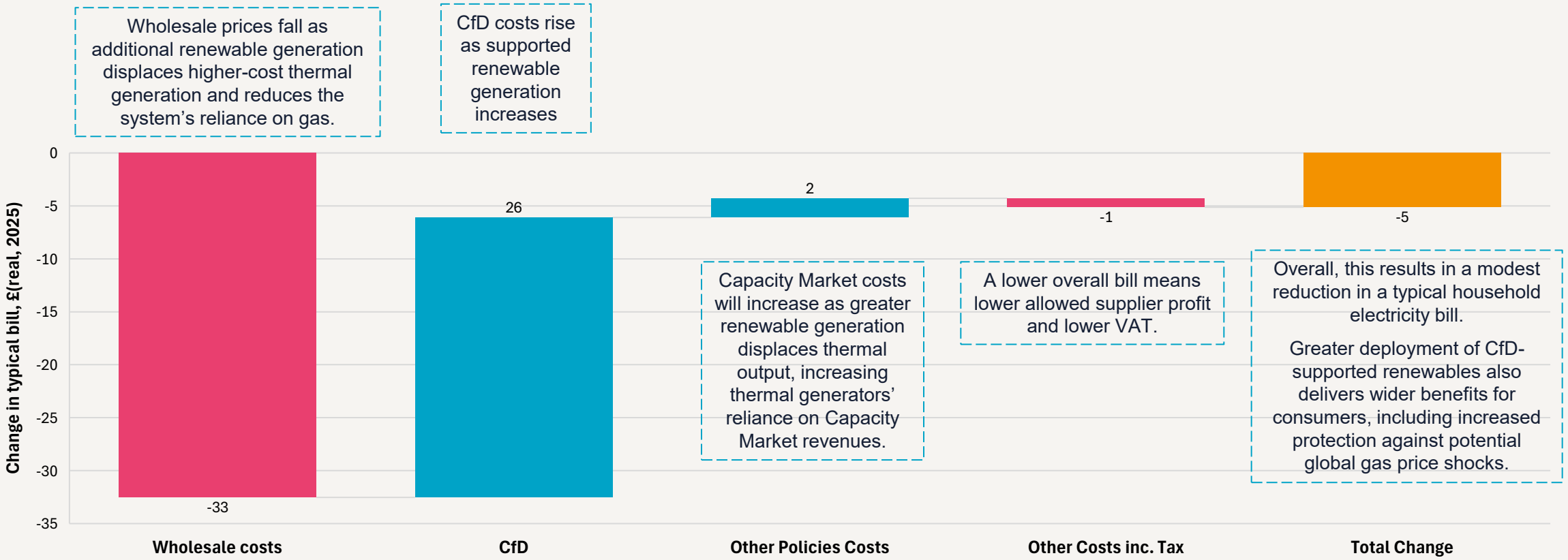


Renewables procured in AR8 will reduce household electricity bills

By bringing together wholesale costs, CfD costs, network charges, balancing costs, policy costs, and additional elements such as supplier costs and VAT, we can project how a typical household electricity bill will be impacted by the inclusion of additional renewable capacity through AR8.

The chart below shows the change in a typical household bill in 2035 relative to a counterfactual scenario where the renewable capacity procured through AR8 is not deployed.

Change in a typical annual household electricity bill in 2035 due to renewable capacity procured in AR8



Consumer benefits are potentially substantial but highly sensitive to assumptions

More renewables can lower bills and reduce exposure to gas, but the size of the benefit depends on uncertain market, system and policy assumptions – making it difficult to predict outcomes and the right bidding strategy

Potential greater consumer benefit

1. **Higher or more volatile gas prices.** Additional renewable generation can displace gas and therefore lower the frequency with which gas sets the power price. This provides consumers with a stronger hedge against adverse gas price outcomes.

2. **Higher demand or slower delivery of other low-carbon capacity.** Faster electrification, delays to generation, flexibility, networks and interconnectors, and the risk of more expensive future renewables increase the value of additional capacity in AR8.

3. **Better project and network delivery.** Faster connections and timely transmission buildout lower curtailment and allow more renewable output to reach consumers, increasing avoided fuel, carbon and wholesale costs.

Central estimate

Central co-optimised consumer benefit result.

Procurement can reduce expected bills and consumers' exposure to volatile gas prices.

But insurance value may be understated by a single central scenario.

Potential lower consumer benefit

1. **Lower gas prices or weaker gas–power price coupling.** Avoided wholesale price benefits fall, although the strategic value of decarbonisation and energy security remains.

2. **Lower demand or faster delivery of alternative capacity.** Faster deployment of other low-carbon generation capacity, including an expectation of cheaper renewables coming forward in future Allocation Rounds can reduce the incremental value of further CfD procurement.

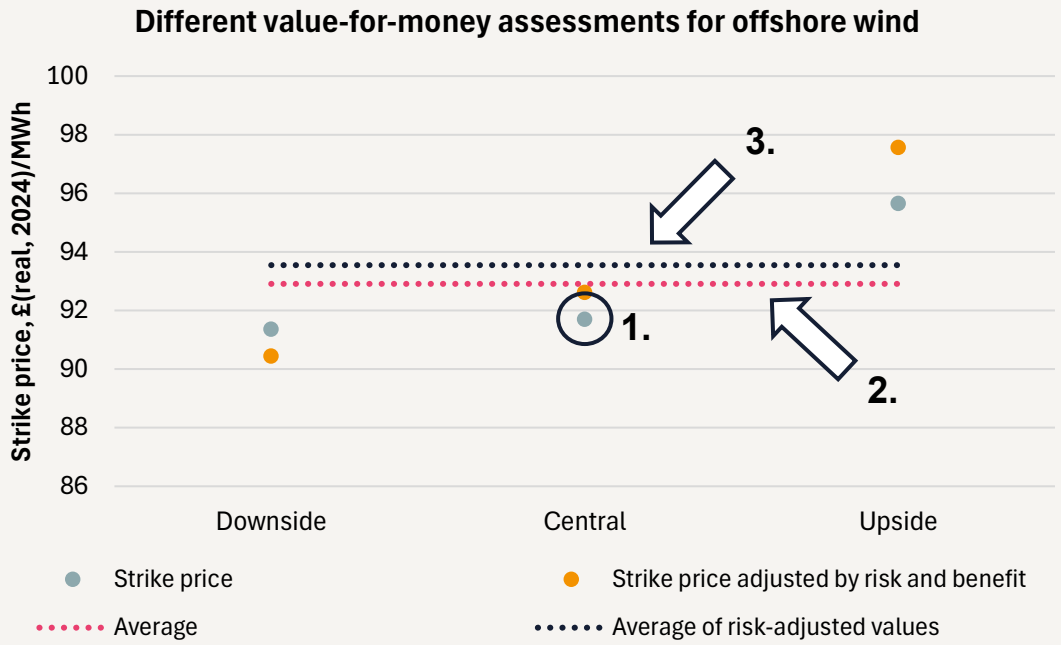
3. **Higher curtailment and slower network delivery.** Delayed transmission and distribution network upgrades can constrain renewable output and increase balancing and constraint costs.

No single scenario is perfect – Government and auction participants should test multiple scenarios

To optimise the outcome multiple credible scenarios should be modelled and with the procurement outcome selected using a risk-weighted assessment of consumer benefit. This should be analogous to the Capacity Market target-setting approach: DESNZ decisions should not be based solely on the most likely central forecast but should reflect the asymmetric consumer cost of adverse outcomes.
Under-procurement can leave consumers materially exposed to high gas prices, high power prices and delayed decarbonisation. This downside risk should be explicitly valued.

Other market, system, delivery and policy uncertainties may also affect consumer benefit.

Value for money includes insurance against adverse energy market outcomes



Scenario	Conditions used in report	Strike price maximising consumer benefit[1,2]
Downside	Higher future procurement of intermittent renewable generation	£91/MWh
Central	LCP Delta Central assumptions	£92/MWh
Upside	Lower future procurement of intermittent renewable generation	£96/MWh

1 Central case decision

Procure based only on the central forecast.

Risk: overlooks the relative differences between the central and upside/downside scenarios.

2 Simple average decision

Give equal weight to upside, central and downside scenarios.

Risk: assumes that all outcomes are equally likely and that the consumer consequences of getting each outcome wrong are symmetrical.

3 Risk- and benefit-weighted decision[3]

Weight scenarios by likelihood, and by the broader consumer cost and social value of adverse outcomes.

Benefit: recognises that under-procurement can leave consumers exposed to very high gas and power prices, while the cost of modest over-procurement may be lower or more manageable.

Insurance value

More offshore wind reduces dependence on gas generation at the margin. In high-gas-price scenarios, this can lower wholesale power prices and CfD-backed output can provide a hedge for consumers. The value of that hedge is asymmetric: the wider societal value of under-procurement in an adverse scenario can be much larger than the cost of procuring modest additional capacity in a benign scenario as higher power prices can cause wider economic shocks through higher unemployment and consumer bill support.

1. *All prices £(real 2024)/MWh*
2. *See Scottish value in full report*
3. *Illustrative weighting – DESNZ has not yet announced detailed scenario modelling*

How LCP Delta can help you succeed in CfD auction bidding

Why LCP Delta are the right team to support participants in CfD bidding strategy

Our project-by-project modelling of CfD auctions has enabled us to provide an unmatched level of detail into the auction dynamics. We have helped our clients successfully bid in multiple auctions. Additionally, our work has been showcased in many reputable publications.

- We are a highly **trusted and independent** authority on power markets, having advised governments, investors and traders on Power Markets for over a decade, underpinned policy and provided **over 100 clients with power market and revenue forecasts** since 2010.
- Allocation Round 8 will use a fundamentally different approach to auction clearing than previous years with a strong emphasis on consumer costs. With many of our experts having worked in government in the past, we **understand the DESNZ and government perspectives** on their goals.
- The new auction clearing approach requires a different modelling approach than previous years, as well. LCP Delta **build all of our models in-house and continuously update them** to ensure we capture the evolving GB landscape, we are able to incorporate this methodological change easily.
- We combine our in-house market intelligence with **Energy Pulse** and **Solar Pulse** databases, giving us access to comprehensive, regularly updated project-level data across the GB renewable energy pipeline.
- We have extensive experience **modelling renewable** assets, including supporting CfD bidding decisions across GB and Ireland, informing the LCCC of key risks to CfD agreement holders and modelling renewable portfolios based on differing risk levels.

"LCP Delta's collaborative approach and attention to detail played a central role in Benbrack securing a Contract for Difference in AR5. Moreover, the team's experience and insight had a valuable impact on our own decision making."

Michelle Fong,
Regulatory Affairs & Strategy Advisor

SDIC Red Rock Power Limited

"We've worked closely with LCP for almost a decade, and they've provided us with market-leading analysis and modelling tools to support key commercial decisions. They get to grips with the most significant issues and invariably deliver significant insights."

Mark Jones,
Market Analysis Manager

RWE

Press Coverage of LCP Delta analysis

LCPDelta

Annex

GB market dispatch modelling

Model inputs

Commodity prices

Including gas, carbon and coal price projections.

Demand

Hourly demand profiles and future projections (EVs, heat).

Weather data

Historic half hourly wind speeds and solar irradiance at 20x20km granularity.

Ancillary services

Requirements for ancillary services including inertia, frequency and reserve.

Regulatory & Policy

Support mechanisms, market arrangements, taxes and charges.

IC & Network

Network & IC build, foreign market demand-supply assumptions

Capacity build

Build-out for some techs, like solar, wind and nuclear are input assumptions.

Plant data

Plant (existing & future), inc. capacity, location, efficiency and operating costs.

Storage

Storage parameters including round-trip efficiency, degradation and duration

Scenarios: LCP central, high, low. NGESO FES. Client specific.

Model simulation engine

New investment simulated through two mechanisms:
- Capacity Market
- Contracts for Difference (CfDs)

Bids based on discounted cashflow projections.

24 x 365
30 years
20+ sims

Stochastics: each year is simulated 20+ times to capture variations in demand, wind, solar and outages.

Hourly dispatch

Wholesale market generation to meet demand based on generator:
- Availability
- Short-run marginal costs
- Operating parameters

Storage behaviour is optimised

Balancing market simulated by re-dispatching flexible plant based on cost to satisfy imbalance volumes and network constraints.

Ancillary markets (frequency response, reserve, inertia) are **also** simulated by re-dispatching flexible plant to satisfy requirement, based on opportunity cost.

Model outputs

Market outcomes
- Wholesale, BM, Ancillary, CM prices
- Network charges
- Generation mix

Cost benefit analysis
- System costs
- Consumer costs
- Policy costs
- Emissions, Curtailment

Individual asset outputs
- Wholesale, BM, Ancillary, Capacity market revenues
- Load factor, cycles
- Captured prices

Portfolio & investment
- IRR, NAV
- Risk vs reward
- Diversification benefits

Outputs: Annual, Monthly, Hourly

About LCP Delta

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- Storage
- Power trading
- Networks
- Flexibility services
- Solar
- EV charging
- Home energy management
- Electrification of heat

...joining dots across the whole value chain

Supporting clients to invest in and navigate the energy transition

We provide mission critical data & insight

Enabled by our market leading technology

Across the value chain

Driving your strategic & investment decisions

+ Investors
+ Energy companies
+ Asset & infrastructure owners & developers
+ Governments & regulators
+ Product manufacturers
+ Power traders

Coverage	Energy experts	Clients	Offices
Europe is core International reach & client base	120+	250+	Berlin Cambridge Edinburgh London Paris

Strategic support

Business growth advice	Revenue forecasting	Due diligence	Customer insight
Market insights	Policy & regulation	Whole system modelling	Training & masterclasses

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