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## 29th July 2025

## RE: Parliamentary Question HL8970 – Source of Analysis on Wind and Solar Project Costs

Dear Lord Lilley,

I am writing to you in response to your Parliamentary Question on the sources of wind and solar project costs used in our <u>Clean Power 2030 Advice to Government</u>, published in November 2024.

NESO is committed to transparency and using established data sources as the basis of our analysis. The Clean Power 2030 Advice to Government <u>Assumptions Document</u> sets out the assumptions and sources used in the analysis. The description of the methodology used is available in <u>Annex 4</u>: <u>Costs and benefit analysis</u> report on page 8. We have also released the exact values used in our response to a Freedom of Information request published earlier this year.

I have summarised our approach in relation to wind and solar costs below.

## Capital and Operating Costs of Wind and Solar Projects

The source for the estimates of the capital and operating costs of wind and solar generation in our Clean Power 2030 Advice are taken from the <u>Government's published Electricity Generation</u> <u>Costs 2023</u>, the latest published data at the time of producing the analysis. We rebased raw costs from their original price bases to real 2024 terms using the Consumer Price Index (CPI).

The costs of Contracts for Difference (CfD) eligible technologies considered in the CP30 advice analysis (onshore wind, offshore wind, and solar photovoltaics) were further adjusted to reflect observed cost changes in recent years. The adjustment was based on DESNZ's methodology used to set <u>Administrative Strike Prices (ASP) for CfD Allocation Round 6 (AR6)</u>. The adjustment included uplifts applied to the construction cost resulting in a cautious approach for these technologies, as the ASP are higher than the actual strike prices observed in AR6. Additionally, we performed a high and low-cost sensitivity for these technologies to capture uncertainties.





## **Renewable Load factors**

In our CP30 advice, we used our own load factor assumptions, derived from underlying hourly renewable profiles for offshore wind, onshore wind and solar photovoltaic generation. These profiles differ by region and incorporate estimates for wake effects for offshore wind, outage rates and improvements in technology over time. This affects costings, as a lower load factor means more capacity, and our cost estimates were calculated based on capital expenditure.

Across both of our modelled CP30 scenarios, these renewable profiles yield average annual load factors after curtailment of 43% for offshore wind, 24% for onshore wind and 11% for solar photovoltaics.

We hope you find this response helpful, and please do let us know if we can be of any further assistance in this matter.

Yours sincerely,

**Claire Dykta** 

Director of Strategy and Policy