

The Chairman
Scottish Affairs Committee
House of Commons
London SW1A 0AA

6 March 2025

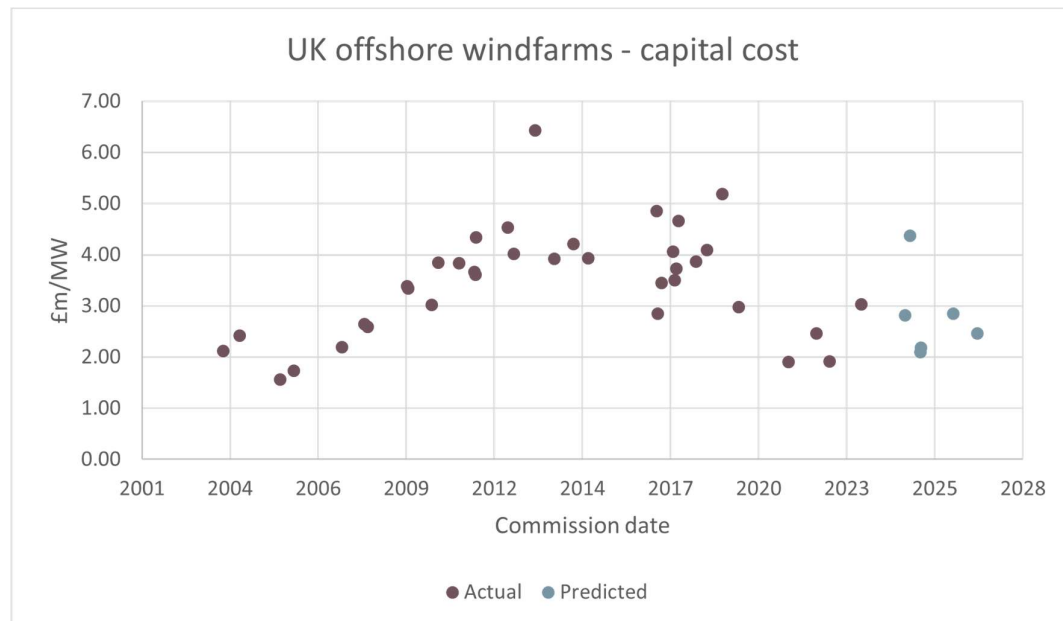
Dear Ms Ferguson

I am writing to express my deep concern over the oral evidence given to the GB Energy inquiry by Emma Pinchbeck, the CEO of the Climate Change Committee. I believe the committee was misled.

According to the transcript published on your web page, Ms Pinchbeck said:

...because of the overall efficiencies of renewables and their cost to build versus fossil plant, [that] they are a cheaper technology and the economy overall benefits. We can also see, against the baseline, that bills will be lower in 2050 if we deliver net zero than they would be if we keep a fossil system.

The statement is grossly misleading. The figure below shows the actual build cost per unit capacity for the fleet of offshore windfarms, together with estimated completion costs for forthcoming ones, in both cases derived from audited financial accounts. It is clear that a figure of around £2.5m per megawatt would be a reasonable best estimate.



Director: Andrew Montford

Board of Directors: Neil Record (Chairman), The Rt Hon Lord Frost CMG
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However, our most recent gas-fired power station, Keadby 2, cost around £0.5m per megawatt. Thus, far from the build cost being lower, offshore windfarms are around five times as expensive as gas per unit capacity.

Worse, an offshore windfarm only delivers around 40% of its capacity on average. Thus in terms of capital cost per kilowatt hour delivered, they are more than ten times as expensive.

In addition, financial accounts reveal that the maintenance costs of an offshore windfarm are around £200,000 per megawatt of capacity, perhaps four times as much as a gas-fired power station. Thus in per-kilowatt-hour terms, the maintenance costs of offshore wind are around ten times those of a gas-fired power station.

In other words, in terms of the build cost (or indeed of the maintenance cost), renewables cannot correctly be described as 'a cheaper technology'.

The only saving from running renewables is on fuel cost. To assess the picture taking into account all costs, we can look at payments under the Contracts for Difference (CfD) subsidy scheme. The scheme pays subsidies to renewables generators when their fixed strike price is above market prices, but generators have to pay back when their strike price is lower than market prices. Market prices were high in the first half of February, because of high demand for gas, due to cold weather and low storage levels in the EU. Nevertheless, very few renewables generators (~20) were paying back. Net payments *out* will be over £150 million for the month.

Now that gas prices are falling again, we can expect most or all of those 20 generators to become net subsidy receivers. Thus, even when high gas prices are taken into account, offshore wind cannot overall be correctly described as 'a cheaper technology'.

Finally, I should point out that simply comparing the generation costs of different technologies is an approach that is deprecated by energy system experts, who recognise that the only correct way to assess different plans is to look at the costs of the system as a whole. Unfortunately, the system costing commissioned by The Rt Hon Claire Coutinho MP during her time as Secretary of State at DESNZ was cancelled by The Rt Hon Ed Miliband MP on taking office. However, Net Zero Watch has recently published a costing of the 2030 electricity system.¹ The author, Professor Gordon Hughes of Edinburgh University, who is arguably the UK's foremost expert in the field, finds that the renewables-based energy system envisaged by Mr Miliband would cost households at least an extra £900 per year.

Yours sincerely



Andrew Montford
Director

cc: Emma Pinchbeck, CCC.

¹ <https://www.netzerowatch.com/all-papers/hughes-system-cost-2030>