

Written evidence submitted by Mr James Dey (NZG0002)

Dear Committee,

The focus of going Net Zero is to reduce CO2 emissions in:-

1. Electricity supply
2. Transport
3. Domestic Heating

The success so far is in that order.

Renewable energy capacity now amounts to over 50% of electricity supply but further progress without destabilising supply is reliant on improvements to National Grid and investment in nuclear to replace gas as a stable energy source that can meet demand when wind & solar aren't possible. Initiatives such as grants for solar panels to householders made little sense as wind is far more reliable in the UK and solar farms are more efficient. Paying mostly wealthy householders, taxpayer rebates is a transfer of wealth to the rich.

EV ownership is increasing, but it is mainly hybrids that are being bought with very few people buying BEVs. The main issue is that unless you can charge from home, the savings vs petrol/diesel are significantly less if using public chargers with those that charge the fastest costing more. As a lot of people live in terraced houses or flats, they are unable to install charging points at home. So government subsidies for EVs & charging point installation again mainly benefit the rich. The transport solution for poorer households appears to not be EVs but bicycles alienating the less wealthy. Public chargers although increasing are also not standardised and unreliable.

Domestic heating is the most problematic of the 3 key areas. There appears to be no viable solution for the vast majority of householders who already have gas central heating. Heat pumps only make economic sense if you live in a well insulated detached house with oil fired heating. Although heat pumps are 3 to 4 times as efficient as a gas boiler, the cost of electricity vs gas is 4 times higher rendering no OpEx saving, whereas the CapEx upfront cost is £8k to £10k higher. There will be OpEx savings from insulating but the CapEx costs are so high that it would take decades to recover money whilst average residence in same house is about 21 years, thus it again makes no economic sense. Other problems are disruption, planning permission, finding tradesmen and if you live in flats, terraced house or semi, your neighbours would have to agree to insulate at same time if you need solid wall insulation.

Another alternative to gas is hydrogen which has much lower replacement costs but the problem is that hydrogen is mainly produced from fossil fuels currently and it's an expensive process, hence the viability of this option, which is in its infancy is questionable.

The Committee for Climate Change really needs to explain in detail how the points above can practically be overcome and, if so, whether they have done so themselves to provide confidence.

Although, opinion polls may suggest that the UK public support NetZero moves, there's currently very little evidence that they are willing to pay unless it makes economic sense.

Yours sincerely, James Dey

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