

Letter: Dr A Jones, PhD, CEng, FIET

Please find letter and maps below sent to SAS by Dr A Jones, PhD, CEng, FIET. We hope you find them of interest.

Further to our recent correspondence on Net Zero <https://uknetzero.blogspot.com/> I am now working on a companion document that examines onshore wind, especially in Scotland. As part of the analysis for this document I have constructed a database that covers existing and future windfarm installations based on Local Planning Authority Areas, and I thought it may be of visual interest to see the extent of a) the scale and location of existing operational wind farms and those presently under construction, and b) the scale and location of pipeline wind farms. By pipeline I mean those that are consented together with those that have had appeals consented along with those submitted to planning as well as those in the appeals system.

In relation to this latter group, I have used modelling from each LPA's record of granting permission (and for the Scottish Government too) to predict the level to which submissions will be granted permission – all things being equal. Of course, we know things in the future may not necessarily equate to those in the past as they may well be greater pressure in to consent in order to achieve Scotland's contribution to Net Zero Leaving this thought to one side for the moment though we should be able to consider the pipeline visual as being reasonably representative at this point in time.

There is one further factor to consider in relation to the pipeline and that is even these wind farms that are consented may not attract funding – we will see next year when the Contract for Difference auction takes place. I suspect larger projects will win out over smaller ones as the economy of scale will help the financials.

Anyway, and even at this early stage it is interesting to reflect on where the larger accumulation of wind farms are distributed and why other areas appear to have escaped almost untouched – and then compare this to the pipeline where a similar comparison can be made.

To provide an extra layer of detail, as my use of colours gives a fairly crude granulation, D&G, where I stay, has the 3rd highest level of existing and under construction windfarm capacity (916MW) but the highest predicted pipeline capacity (948.8MW) in Scotland.

What I plan next is to examine the statistical association between each LPA windfarm capacity and what one might reasonably expect based on LPA area, population, average annual windspeed and a number of other factors, for each area. What this may show, to a level of statistical confidence, is that there is bias in the choice of location for siting wind farms.

I thought in the meanwhile the diagrams I have attached may be of interest to your supporters.

Regards,

Alan
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Dumfries



