

In search of cheap power

So far the UK's ambition to be the Saudi Arabia of wind has put in an impressive 29GW of capacity. On a good day when there is plenty of wind and total demand is only around 30 GW this might deliver half our power needs. On a day of low wind, and when winter demand is over 40GW it might be 1-2%. It is true the cost of supplying the capacity and therefore of the power has come down as turbines have been scaled up and their capacity cost has fallen. Since 2010 levy support and contracts for difference have cost us an extra £80bn plus for renewable power (to 2023). Current electricity bills are around £100 higher thanks to green levies.

Labour and Lib Dems say we can switch over to all no carbon electricity by 2030 and that this will be cheaper. Both these claims seem unlikely. Labour say to get to all carbon free they need to install an additional 87 GW of capacity, allowing plenty of margin over the demand of 30-45 GW depending on time of day and weather. As most of this will be wind, and as the sun does not shine during long dark evenings and early mornings in winter it will still require stand by gas generators and all those interconnectors to import. The truth is we have already become very import dependent, with imports at over one fifth of our needs even on sunny low demand summer days when the wind dies down. We have been closing fossil fuel stations down before having the renewable reliable capacity (with storage) to replace them

There seems little likelihood that the UK can plan, permit and install anything like 87 GW of renewable capacity in the next six years. The last auction to supply capacity did not go well as the prices offered were unattractive. The lesson was the Regulator needs to allow considerably higher prices to get companies to come forward to offer new capacity. Investors are going to be wary of the opportunities given the history of windfall taxes, price controls and changes of policy. These are all likely to get worse if we have a change of government to Labour.

Labour and Lib Dem buy the idea of cheaper power because they assume gas prices will climb higher and stay there, so wind energy looks cheap in comparison. Instead in recent months gas prices have retraced most of the giddy climb they experienced when Europe determined to get rid of its dependence on imported Russian gas and the Ukraine war sent the price spiralling. Hitting a peak of £6 a therm, it is now back to 80p.

The amount of capacity they envisage would also require a large expansion of the grid with pylons straddling many more landscapes.