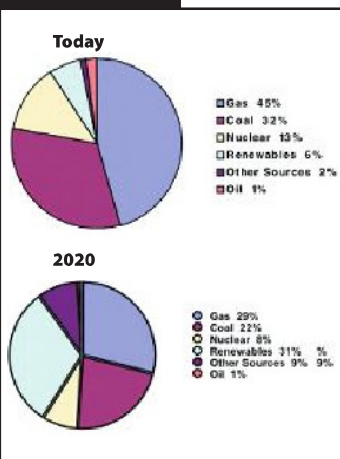


Is offshore the solution?

Following the Crown Estate's recent unveiling of the successful bidders for the available 'Round 3' UK offshore wind farm locations; Dr. Christopher R. Jones and Mr. Robert Richards, University of Sheffield, discuss how an increasing focus on offshore wind development might not spell the end of local opposition!

"recent psychological research would warn against a presumption that an 'offshore address' will necessarily inoculate developments against local opposition"

The current (left) and anticipated (right) electricity mixes for the UK, reflecting the shares of electricity generated from different sources. Note the transition from a 77% reliance on coal and gas today, to a 31% reliance on renewables in 2020. Source: HM Government, DECC ('The UK low-carbon transition plan') July, 2009



At present, electricity generation accounts for approximately one-third of the UK's total GHG emissions; as such, the 'decarbonisation' of this sector is considered a priority for the Government. This transition will require, amongst other things, a considerable increase in electricity obtained from renewable sources. With this in mind, the Government has set a target of meeting 31% of electricity demand from renewables by 2020 (see graph below).

Change through wind power

Hitting the 2020 targets alone will require a five-fold increase in the 6% of electricity that is currently sourced from renewables. The Government expects much of this proposed increase to come from a rapid expansion in on- and offshore wind-capacity and, as such, has outlined its desire to have 28GW of on- and offshore capacity operational by 2020 (i.e. 14GW of onshore and 14 GW of offshore). The British Wind Energy Association (BWEA) reasons that these targets are 'eminently achievable'; however, they are concerned that – certainly with respect to onshore development – industry is failing to see the required growth in "...either

the number or capacity of consents coming through the planning system'.

A major reason for the sluggish nature of the planning system in the UK is petitioning on the part of local opposition groups. Such opposition has been shown to be an effective means of both delaying and curtailing the receipt of planning

permission. While the reasons that motivate opposition to local wind development are manifold, research appears to indicate that the issue of visual impact is particularly pertinent. If true, then one could logically assume that reducing the visual impact of proposed developments should increase approval rates.

One often considered means of achieving this is to increase the focus on offshore schemes. This is a plan likely to sit well with the BWEA who feel that a 14GW target outlined by the Government grossly underestimates the contribution that could be made by this sector. However, while UK waters might physically harbour ample capacity to achieve more ambitious targets, recent psychological research would warn against a presumption that an 'offshore address' will necessarily inoculate developments against local opposition.

The psychology of offshore wind development

The UK coastline is, in places, a very populated and desirable place to live. While offshore development in near-shore locations is unlikely to loom as large over coastline communities as comparative onshore development, the appearance of vertical wind turbines in an otherwise horizontal seascape (in addition to the onshore infrastructure that would necessarily accompany such development) could noticeably change the vista experienced by such communities. Dr. Claire Hagggett (University of Edinburgh) in her 2008 paper entitled 'Over the sea and far away?' argues that a number of the issues that concern people about onshore development (including visual impact) are often retained in the face

of offshore proposals; albeit perhaps manifesting themselves in different ways.

Research has also found that opposition to offshore development is likely to be amplified in situations where the seascape is important to a person's identification with (or attachment to) their local environment. For example, a recent study conducted by Prof. Patrick Devine-Wright (University of Exeter) into public opinion towards the 250-turbine 'Gwynt-y-Mor' development in Liverpool Bay near Llandudno (North Wales) revealed that a number of local residents were opposed to the wind farm on the grounds that it threatened to 'fence in the bay'; industrialising a seascape of deep aesthetic importance.

Is offshore the answer?

Offshore wind-development will inevitably play an important role; however, while opinion polls commonly suggest that such development is generally preferred over the onshore alternative, we would advise against assuming that this signals a green-light for all such development. For one, reliance upon general opinion is imprudent as averages will often conceal the variability that exists in opinion towards development at specific sites. Secondly, the literature outlined above clearly illustrates that offshore development will not necessarily be devoid of local opposition. In short, peoples' 'backyards' do not end at the shoreline; thus, as more development is planned for offshore locations, we would be wise not to forget the lessons we have learnt about the antecedents and answers to opposition in an onshore context!
www.cf.ac.uk/psych/subsites/understandingrisk/index.html