



UK Experiences of Repowering, Life-Extension and Decommissioning

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WHY IS THIS IMPORTANT?

AGEING of EXISTING WIND FARMS

I'M GETTING TO THE END OF MY LIFE...



OPERATIONAL / CONSENT

WHAT'S NEXT?



LIFE-EXTENSION?



RE-POWERING?



DECOMMISSIONING?

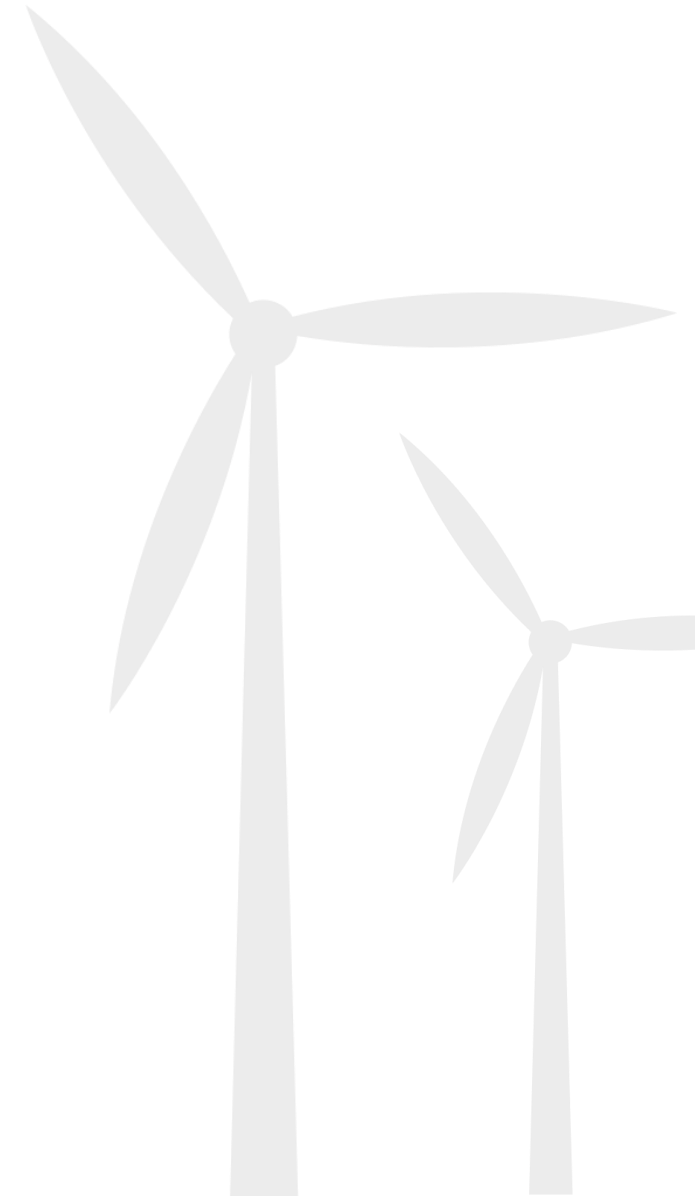


ABANDONMENT?

GROWING COMPETITION FOR LAND



- 25-year planning consents commonly used in England, Wales and Scotland but are not a policy requirement
- Applications highlighting the ‘temporary’ and ‘reversible’ nature of the infrastructure



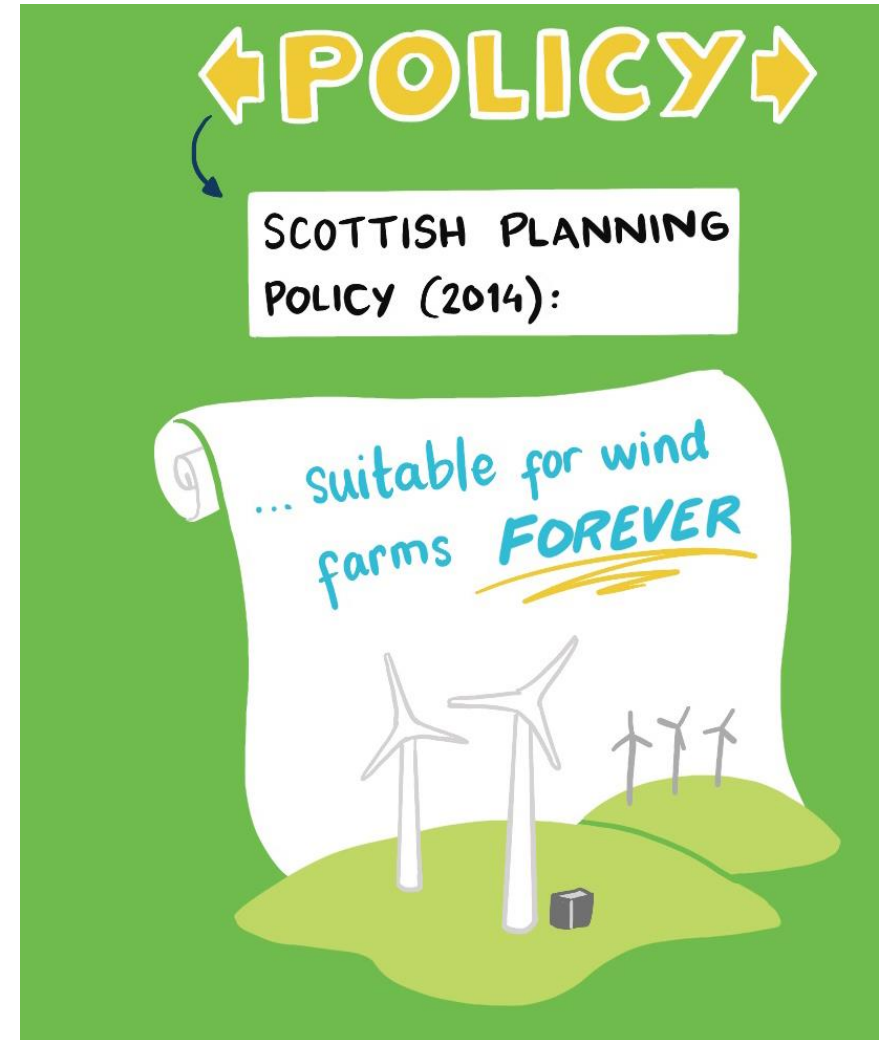
- A lot of UK wind farms reaching end-of-life stage
- Given the constraints facing new onshore wind farms in England, repowering provides the main opportunity to increase overall output
- There is a need to consider the impact of re-consenting onshore wind sites that were originally ‘temporary’

What has happened so far?

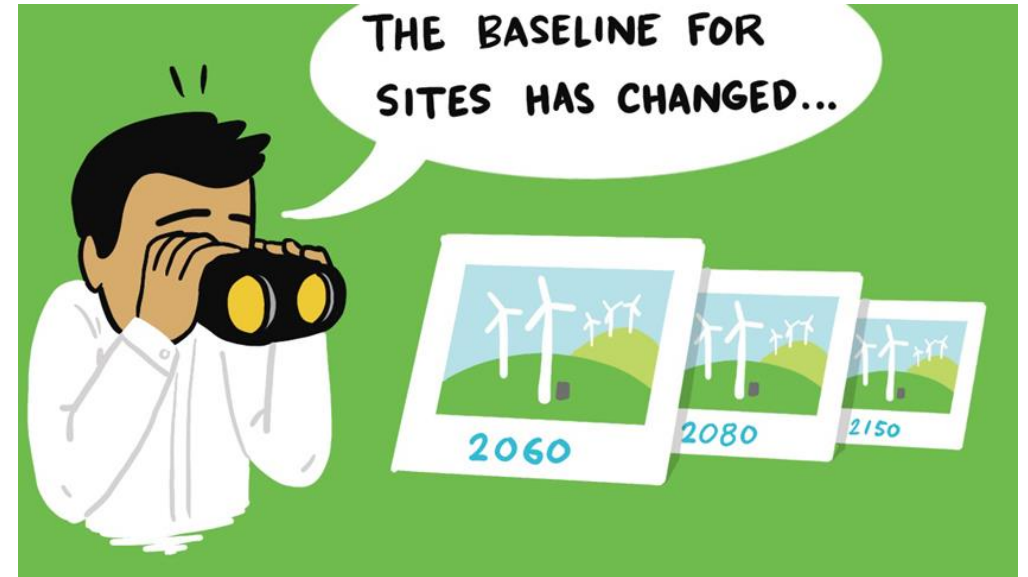
- Increase in repowering over the past five years, with most applications approved
- Increase in life-extension applications
- Only a couple of sites decommissioned



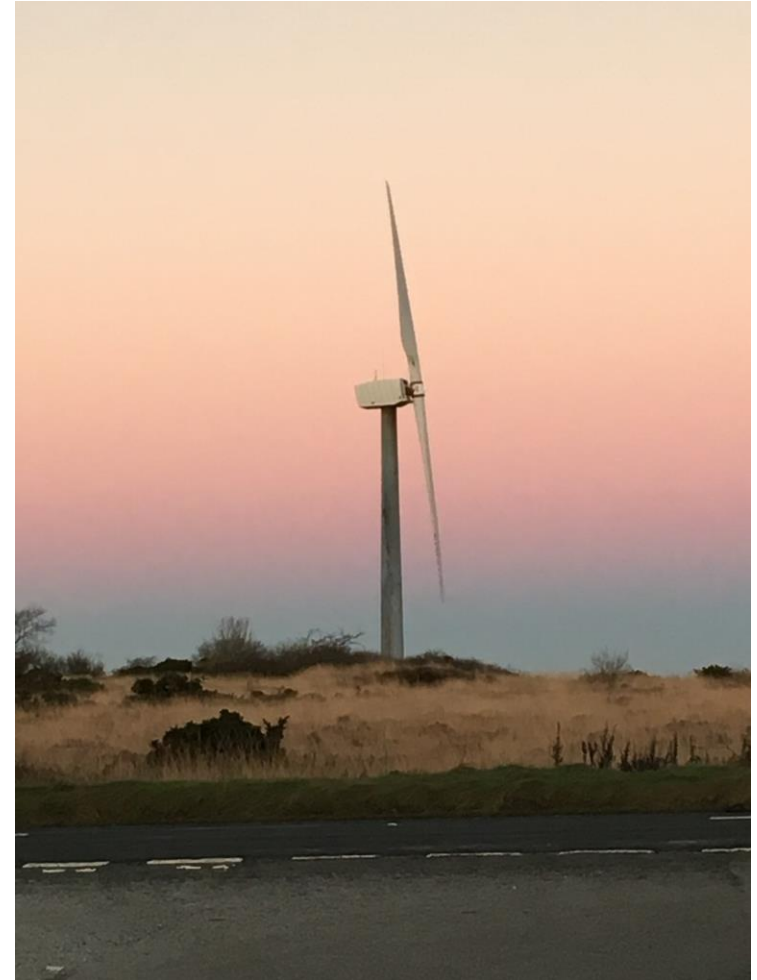
- Policy starting to catch up with industry
- Limitations in policy / guidance in England and Wales
- Positive move forward in Scotland



- **Physical landscape changes** e.g., development of nearby windfarms, houses or other built development in surrounding areas, changes in landscape designations
- **Social landscape changes** e.g., changes in familiarity with the infrastructure, perceptions of the landscape, community-developer relations, composition of the local community, perceptions of community benefits
- **Site-specific factors** e.g., site access, grid availability, position of landowner



- Aim to get the most out of existing sites – infrastructure now lasting longer than 25 years
- Uncertain context for submitting applications creates a slow process
- Strategy of increasing consent durations
- Viability concerns



‘I was right up to the wire on it in sort of making my mind up’

‘Making the right decision is the biggest challenge’

‘I felt that we were left in a bit of a policy vacuum’

- Significance of how the original wind farm was considered
- Acceptability of wind farms does not always increase over time with familiarity
- Significance of community–developer relations and meaningful community benefits
- Differences in responses to repowering and life-extension applications



- Original consent granted by Secretary Of State to 'test' wind energy
- Lake District designated as a World Heritage Site
- Wind farms developed in the surrounding area
- Local opposition to both repowering and life-extension



- Error in application – a requirement to remove turbines but not associated infrastructure
- Local perceptions of developer bribery
- Uncertainty for local authority decision-makers





Concluding thoughts

- Repowering can increase energy output, provide enhanced community and environmental benefits, and improve visual impact; however, local support should not be assumed
- Not all sites may be suitable for repowering
- Community experiences of existing sites are key

Latest paper: Windemer, R., 2023. [Planning for the Future of Onshore Wind Farms through Adopting a Broader Temporal Approach](#). Planning Theory & Practice, 24(4), pp.489-510.

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