

The renewable energy sector needs to use a wider range of business models in order to ensure a fairer distribution of power plants across the UK, according to research funded by the Economic and Social Research Council (ESRC).

Renewable energy policies should encourage more community-owned projects to avoid a concentration of commercial power plants in poorer areas, argues Dr Dan van der Horst at the University of Birmingham who led the research project.

An analysis of wind farm applications in England shows that rejection of wind energy projects is connected to areas with high political engagement and high life expectancy. The current trend shows that many technically suitable locations may remain unused because of the threat of effective local resistance by people who are relatively privileged.

Planning delays and rejections encourage commercial developers to instead focus on remote or deprived communities as sites for new power plants. In areas of economic fragility, commercial plants are more easily established without having to provide many benefits for the local community.

Many small scale community-driven renewable power plants have been successfully developed in recent years, providing a valuable potential for building and sharing practical knowledge. But this potential can only be fully utilised if we find new ways to encourage community-led social enterprises, extending beyond remote sites to more urban landscapes.

'Policymakers should embrace policies to encourage a wider sense of ownership of projects,' says Dr van der Horst. 'There should be structures to ensure that more benefits flow to local communities in economically fragile areas, and encouragement for residents to invest in local projects - especially in more privileged areas.'