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News release

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Study of the impacts of wind farms points to constructive path towards better assessments

A report published today (Thursday 2 July 2015) by ClimateXChange increases our understanding of how to better predict and mitigate visual, shadow flicker and noise impacts of new wind farm developments in Scotland.

The report presents the findings of a two-year study reviewing ten wind farms from across Scotland, comparing the impacts predicted before development to those evident once the wind farm is operational.

The study finds the majority of assessments presented at planning stage for the ten case study wind farms followed visual, shadow flicker and noise guidelines that applied at the time. It identifies improvements in planning guidance and good practice that have been made more recently. The study also highlights a range of further improvements that could ensure a more consistent approach to predicting, measuring and documenting visual, shadow flicker and noise impacts throughout the design and operation of wind farms.

As the first of its kind in the UK, the study extends understanding of how local residents experience wind farms. The report makes a number of recommendations for better guidance on how to predict and mitigate impacts, and suggests there is a need to present expected impacts to residents in a more meaningful way.

The project looked at whether the impacts predicted by developers in documentation submitted with their planning applications are consistent with the impacts experienced once the wind farm is operational.

The research used two sources of information:

- How local residents experience and react to visual, shadow flicker and noise impacts.
- How the predicted impacts at the planning stage compare with the impacts when the wind farm is operating, as assessed by professional consultants.

The main findings are:

- The majority of assessments presented at planning stage for the ten case study wind farms identified and mainly followed extant guidelines.
- However, for some of the case study wind farms, extant guidelines were not consistently
 followed and/or the impacts predicted in the documentation submitted with developers'
 planning applications were not consistent with the actual impacts as assessed in this study
 or as reported by some local residents.
- Assessments and public engagement activities had not always adequately prepared residents for the impacts of the operational wind farm in terms of visual, shadow flicker or noise impacts.

There are a number of parallel initiatives and research projects aimed at deepening understanding of impacts, and this study is able to add to that important body of work. The assessment of noise in the study was mainly based on modelling, which cannot capture all aspects of experienced noise. This area should be explored further.

Ragne Low, Project Manager for ClimateXChange said: 'As the study has focussed on issues relating to the planning process, we are confident that the findings will feed into improved practice in measuring the predicted impacts of proposed wind farms, and in communicating this to decision-makers and those likely to be affected.'

'The findings point to several possible improvements in planning guidance and good practice. Some have been implemented in the time between the case study wind farms being planned and built, and the present. The study will contribute to building on these improvements.'

'It is very encouraging to see that the project has been overseen by a broad steering group, and we urge everyone involved to continue this inclusive process to develop the impact assessment process.'