

# NOISE ASSESSMENT SERVICES

## CAPABILITIES

■ In taking more than 100 renewable energy projects through the planning application process in the last eight years, Green Cat Renewables has developed a broad range of expertise in noise assessment both as part of the planning process and to demonstrate compliance with noise related planning conditions post construction.

MORE THAN 100 RENEWABLE ENERGY PROJECTS THROUGH THE PLANNING APPLICATION PROCESS IN THE LAST EIGHT YEARS.

Through our dedicated noise team, the company has developed experience of measuring wind turbine sound power levels, identifying faults using noise measurement, construction noise assessment and designing noise insulation solutions for plant enclosures.

## CAPABILITIES

- ETSU-R-97 background noise assessments for planning applications and pre-construction
- ETSU-R-97 planning compliance assessments and reporting
- Assessment of amplitude modulation for wind turbines using audio recording for noise source validation, with experience of using the 'Den Brook' method
- Noise mitigation design involving liaising with wind turbine manufacturers
- BS EN 61400-11 wind turbine noise performance measurements for turbine warranty compliance
- BS 4142 assessments of industrial noise affecting mixed

residential and industrial areas

- BS 5228 construction noise assessment
- BS 8223 control and insulation of noise in and around buildings, including noise insulation specifications for buildings such as powerhouses for hydro schemes.
- Noise assessment for Environmental Impact Assessment, including in addition to the above:
  - Desktop scoping study to discover noise constraints at an early stage.
  - ISO 9613:2 modelling of the potential noise levels at nearby properties produced by candidate wind or hydro turbines
  - Liaising with EHOs and planners to determine noise monitoring requirements including the production of noise contour maps.
  - Cumulative noise assessments to determine the capacity of a site, influenced by neighbouring developments, to accommodate the proposed development.

