



Our specialist team of environmental and planning consultants provide technical advice and support to clients ensuring compliance with operational commitments.



Our experience includes providing the full suite of environmental compliance support for the onshore and offshore renewables markets. We encourage adding value to compliance work through integration with operational asset managers.

We provide the following services:

### Environmental Compliance

- Conducting site based environmental audits
- Review and application of environmental licences
- Review planning condition discharge/compliance
- Implementation and auditing of environmental management system

### Management and Monitoring Plans

- Production and management of Habitat and Land Management Plans
- Production and management of environmental monitoring plans
- Consultation with site Working Groups and other stakeholders
- Co-ordination and implementation of management plans (e.g. ditch blocking, heather management)

### Monitoring for Onshore Sites

- Ornithology and ecology monitoring, including flight activity (vantage point) surveys, species-specific surveys, and carcass surveys
- Vegetation monitoring
- Water quality and peat monitoring

### Monitoring for Offshore Sites

- Monitoring for ornithology, marine mammals, fish and benthic habitats, including boat-based and aerial surveys
- Under water video inspection surveys of foundations



// a robust monitoring program with appropriate analysis can feed into EIAs as part of a Levelised Cost of Energy strategy for new sites, life extensions and re-powering //

**Chris Pendlebury**, Director of Planning & Environment





### Case Study 1 **Mynydd Portref Wind Farm, Wales**

Natural Power undertook vegetation monitoring in 2015 as part of a programme of post-construction ecological monitoring. The aim of the habitat management is to reduce the dominance of rank purple moor-grass and rushes in both valley mire and marshy grassland habitats and thereby increase their sward diversity. A walkover survey and sampling methodology based on JNCC Common Standards Monitoring Guidance was used to assess whether habitat management techniques were achieving these objectives. As the habitats were found to be in unfavourable condition, recommendations were produced to implement a suitable grazing regime with appropriate grazing stock. Additional habitat management will be considered if progress towards favourable condition through grazing alone has not been achieved at the next monitoring cycle due in 2018.

### Case Study 2 **Confidential site**

Following concerns raised by the Scottish Environment Protection Agency (SEPA), Natural Power were asked to conduct an audit on the site drainage system. Under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), sites constructed after April 2007 must be drained by a functional Sustainable Drainage System (SuDS). Antecedent weather conditions highlighted that the installed system was not functioning as intended and in future high rainfall situations, it is possible that the system would continue to suffer. Natural Power's audit highlighted a number of cost effective short and long term solutions to improve the attenuation and treatment of runoff. Recommendations were also provided on a monitoring and maintenance regime to ensure the efficient function of the drainage system that also complies with the requirements of the above regulations.

As a result of the above, Natural Power were then commissioned to carry out a full review of the site's operational requirements. This included a review of the planning consent conditions and supporting documentation to ensure that commitments were being met. A review of the site operational environmental management system was also undertaken to demonstrate compliance with areas such as waste document transfer and storage, license applications and emergency procedures.

### Case Study 3 **Camster Wind Farm, Caithness**

Natural Power has undertaken the first three years of operational monitoring at this site. The aim was to monitor the success of the Land Management Plan, which was set up to restore the felled forest habitat to heathland and peatland, improve the hydrological conditions of the existing blanket bog, and conserve the local populations of hen harrier, merlin and short-eared owl. This has involved vantage point surveys, upland breeding bird surveys, vegetation monitoring, fixed point photography, and dipwell monitoring. The results to date show that the works are generally working, with continuing regeneration of vegetation on site and discouragement of hen harrier away from breeding within the wind farm.

### Case Study 4 **Robin Rigg Offshore Wind Farm, Solway Firth**

Natural Power has carried out operational phase ecology monitoring at E.ON's Robin Rigg since construction in 2005. This included bird, marine mammal, benthic fish and inter-tidal monitoring. Natural Power also undertook extensive data analysis to examine the impacts of construction and operation of the wind farm - the results are published on the Marine Scotland website.

Natural Power has also assisted E.ON with Marine Licence applications for operational work, such as emergency cable repair works and turbine decommissioning/re-installation. In addition, Natural Power has also carried out foundation inspections on turbines and substations using drop down cameras and ROVs in order to assess the level of biofouling and state of the sacrificial anodes on these structures.



For more information contact:

**Michael McQueenie**

Senior Account Manager

[michaelm@naturalpower.com](mailto:michaelm@naturalpower.com)

For full details on our ISO and other certifications, please visit: [naturalpower.com/company](http://naturalpower.com/company)