



Wind monitoring

Golticlay, Caithness Mast refurbishment



Project overview

For well over a decade, Dulas have been offering RWE Renewables a wide range of services, including the installation, refurbishment and decommissioning of met masts. More recently, Dulas has been assisting in the operation and maintenance of their Remote Sensing Devices such as LiDAR and SoDAR units.

Located in the Highlands of Scotland, in the region of Caithness, Dulas are proud to have been given the opportunity to work with RWE Renewables on yet another of their weather measurement campaigns at a site named Golticlay.

Implementation

In 2015, Dulas were appointed to install an 80m guyed tower which included a weather monitoring system complete with “First Class” sensors and data logging capabilities. Following a successful installation in forestry clear-fell, the tower continues to collect data today, as a result of routine maintenance visits and an instrument and hardware refurbishment, carried out in November 2021.

Refurbishment at Golticlay was essential in prolonging the lifespan of the structure due to components such as guy wire ropes, shackles and wire rope grips beginning to show signs of oxidation over the past five years since installation.

In addition to the replacement of hardware items, the refurbishment of measurement sensors was also carried out by our experienced team of climbers, replacing all existing sensors with new, Measnet calibrated sensors, as per IEC 61400-12-1 (Ed.2 2017) recommendation.

The aviation obstacle light at the top of the tower benefitted from a new bespoke power supply*, to ensure operation throughout the year.

*Dulas remote power supplies are available for purchase and rental. Each one is designed to client's requirements to be used to power LiDAR and met masts reliably in the field.



Conclusion of project

Our experienced team of climbers ensured that the refurbishment works were completed within the client's timescales and in accordance to both Eurocode and IEC standards.

It is planned that Golticlay will be home to around 19 turbines, measuring 130m in height. The data has been collected over the past five years and is still monitored closely today. This will be extremely beneficial in determining what the layout of the wind farm will look like in the future.

“RWE is impressed with Dulas’ timely response to our requirements, project management and quality of work in field and reporting”

Nick Clement, RWE Renewables



Met masts

Developing and operating an investment-grade asset depends on robust, accurate and bankable data.

Proven and dependable data from traditional met-masts have been the cornerstone of the modern wind industry since the late 1980s. Understanding wind flow at different heights using advanced anemometry, is at the core of Dulas' DNA since 1988, when we installed our first anemometer and data logger system at the Cemmaes wind farm, Wales.

The enduring appeal of traditional met-masts compared to new technologies such as LiDAR and SoDAR, is much discussed within the wind industry.

Find out more about Dulas' Wind Monitoring turnkey services for traditional met masts at:

dulas.org.uk/wind-energy

