

Brookfield

Wind Analyst
Technical Services, Cork
Permanent
Reporting to: Wind Manager

Brookfield is a global alternative asset manager with over 100 years' experience owning and operating real assets across Infrastructure, Real Estate, Renewable Power and Private Equity.

Brookfield Renewable, part of the broader Brookfield group, is a leading continental independent power producer with fully integrated investment, operating, power marketing and development capabilities. Launching its European platform in Ireland in 2014, the business has experienced significant growth to comprise 2,700 megawatts of renewable wind, solar and hydroelectric pumped storage capacity in the UK, Ireland, Portugal, Germany and France.

This is an exciting time for Brookfield Renewable as it continues to grow its operations globally. For more information, please visit brookfieldrenewable.com

Role Purpose

Reporting to the Wind Manager, the main purpose of this key role is to work as an effective member of the Wind Resource Analysis Team in the provision of high quality technical expert input across the Brookfield business. The primary focus of this role is to undertake the management of data monitoring from the fleet of meteorological masts together with their maintenance with progression to wind assessment and site meteorological conditions work for onshore wind farms at the pre-construction and post-construction stages. The role will be primarily focused on the Irish and UK market, with occasional work for other regions.

Key Accountabilities

- Design of site-specific measurement campaigns for wind.
- Analysis and reporting of site measurements including data from meteorological masts, SODAR and LIDAR.
- Co-ordinate and manage the procurement process for specialist sub-consultants & contractors and manage ongoing relationships including organising meteorological mast installation, maintenance and repair works.
- Ensure that consultants and contractors comply with Brookfield HSSE Policies and Procedures and demonstrate commitment to Brookfield Safety Culture
- Develop tools and systems to analyse wind data and operational performance data, automating these methods, where possible, to improve asset performance and reporting.

- Production of internal wind generation estimates, involving the following: site visits, data processing and quality checking, wind farm layout optimisation, correlation analysis, wind flow and wake modelling, estimation of energy losses, uncertainty analysis and reporting results.
- Communication of site-specific energy production and site condition risks to project teams.
- Liaising with turbine suppliers regarding turbine suitability and technology options.
- Performing technical due diligence of potential acquisition projects.
- Conduct detailed reviews of the performance of the preconstruction energy production modeling against operational data and develop recommendations to improve processes and reduce uncertainties.
- The above tasks will be carried out following the Wind Resource Analysis Team standards. The successful candidate will also play a key role in the development of procedures and assessment of new measurement technologies and analysis tools within the Wind Resource Analysis team.
- Any other duties, as required

Knowledge, Skills & Experience

The successful candidate for this role is a flexible and dynamic individual, a self-starter who displays the following skills and competencies:

- A minimum of 2 years' experience in wind resource assessment.
 - solar or other renewable energy resource assessment experience an advantage (but not a pre-requisite)
- A minimum of a 2.1 honours degree in physics, atmospheric science or mathematics field or equivalent. Masters candidates preferred.
- Aptitude for statistical analysis of data.
- Highly analytical with attention to detail and ability to exercise engineering judgment.
- Experienced in data mining and programming languages such as VBA, Matlab, Python or R is highly desirable.
- Good working knowledge of MS access and SQL.
- Experienced in the following is desirable but not mandatory:
 - WAsP and WindFarmer
 - PVsyst or other solar resource assessment software
 - Experience with CFD wind flow models
- Full clean driving licence.
- Must work well within multidisciplinary teams.
- Excellent communication skills and the ability to communicate technical issues to non-specialist colleagues are essential.
- Ability to manage and work to tight timeframes.
- Excellent technical and analytical skills. Ability to identify issues and implement solutions
- Ability to identify strategic opportunities and present to management
- Fluency in English required. Second European language such as German, French or Portuguese is an advantage.