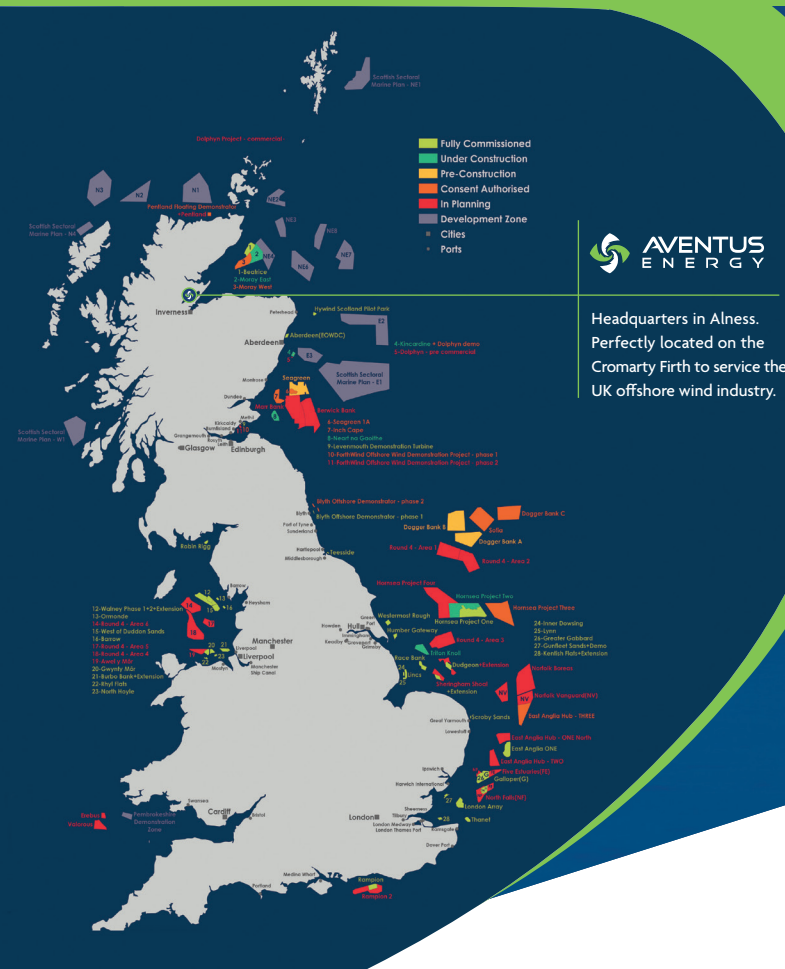
AVENTUS ENERGY

Knowledge | Discovery | Success

Specialist maintenance and upgrade solutions

Aventus Energy Ltd is a recently formed Scottish Highland based company operating from our bespoke premises in Alness which is only a few miles from the world renowned Cromarty Firth Deep-water Port. Our target market is the Onshore/Offshore Renewable Industry, into which we will be providing the full range of IRM supporting services.



AVENTUS ENERGY

Headquarters in Alness. Perfectly located on the Cromarty Firth to service the UK offshore wind industry.

All our services are delivered by a highly skilled, compliant workforce supported by industry best practice operating procedures.

Many of our technicians are dual-qualified in two or more of the following qualifications. This provides our clients with a one-stop-shop that reduces interfaces between multiple vendors and ultimately reduces costs.

Service Overview

- Project Management, Planning and Engineering
- Surveys / General Visual Inspections (GVI's)
- Industrial Coating Inspection & Application
- Blade Inspection and Repair
- Structural, Mechanical & Electrical Inspection and Repair
- Inspection & NDT
- Fabrication and Construction
- Diving / ROV

AVENTUS ENERGY

Our Values

Knowledge

Our senior management team has a combined expertise of more than 100 years working within the marine energy industry. Individually, having all started 'on the tools' in various operational positions, the team eventually worked their way up to senior managerial positions following many years of learning. We strongly believe we have a responsibility to pass this tremendous treasure of knowledge onto the next generation. Our goal is to ensure that the knowledge is passed down and preserved to allow the future leaders of the business the opportunity for success, given they are provided with the same tools as we once were.

Discovery

Our ethos shall always be for the continual Discovery for pioneering innovations in our field, technologies to advance possibilities and strong partnerships to help achieve a shared goal between our partners and us. In unearthing these aspects, we believe we will discover a brighter future is achievable for both our people and customers alike. Entrepreneurship is at our core and will drive our determination to explore new markets, generate additional income streams and provide exciting career opportunities for our highly skilled local pool of labour.

Success

Success is an ambition we all strive to achieve but is only gained from learning from our failures and mistakes. By being courageous we will continue through difficult times to achieve our goals and ensure our people are also rewarded as we grow from strength to strength.

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What we do

Balance of Plant (BoP) Operations & Maintenance

Aventus Energy provides our clients' Balance of Plant (BoP) Operations and Maintenance Services. Our experienced multi-discipline teams can undertake all required General Visual Inspections and Repairs along with the planned O&M schedule.

Services undertaken include;

- Project Management, Planning and Preparation
- Blade Inspection and Repair
- Wind Turbine Foundations and Substructures;
  - Protective Coating Condition Survey and Repair
  - Structural Condition Survey and Repair
  - Mechanical Inspection and Repair
  - Electrical Inspection and Repair
  - Spot-On Metal Repairs
  - Hoisting Equipment – Annual Service and STAT inspections
  - NDT inspections – General Visual Inspection and Non-Destructive Testing
  - Trouble-shooter Assistance – Fault Finding, Alarm Checks etc
  - Dive / ROV Inspection and Protection – Scouring, Marine Growth and Cathodic
- Reporting and Documentation
- Tool, Equipment and Consumables

Blade Inspection & Repair

Aventus Energy provides competent teams to inspect and repair wind turbine blades across our clients' operational fleet. We believe working closely with our clients ultimately;

- Maintain the operating efficiency and integrity of Wind Turbine Generator (WTG) blades via Wind Turbine Blade Inspection and Repair Services.

Blade Inspection

Aventus highly trained personnel will ensure blades are inspected using suitable and approved inspection methods to identify any damage present. Our inspection methods will be detailed and sufficient to give our clients complete confidence that the blades have received a suitable inspection that ensures all defects are noted, classified accordingly. The turbine is in a safe operating condition.

Inspection/Access include:

1. External inspection
   a. Access Methods - Rope Access, MEWP, ROAV, Platform.
   b. Inspection methods - Photo, thermography, laser scanning.
2. Internal Inspection
   Access and Inspection Methods – physical or remote access, including Confined Space Access, Working At Height and Rescue.
3. Drain Hole Clearing and Lightning Conductor Checks
   a. The drain hole is cleared upon visual inspection, and the lightning protection system is checked for continuity.
   b. All inspections completed are to marked up in the inspection report, with a table of lightning resistances and drain holes, noting if they Pass or Fail the criteria.
4. DT and NDT testing

Reporting Methods:

Our reporting structure would typically take the format of an online portal and report document.

1. Client Portal Access
   a. Our clients are provided with access to data to be stored on our secured client portal.
   b. Portal access can be made available to blade repairers to allow open and accurate discussion on damage extents.

Blade Repair

The scope of repair will cover a wide range of defects across several turbine/blade types. This will include both in situ blade repairs and potentially repair with the blade on the ground.

Our technicians are competent in the internal and external repair of all common types of wind turbine blade damages such as (but not limited to):

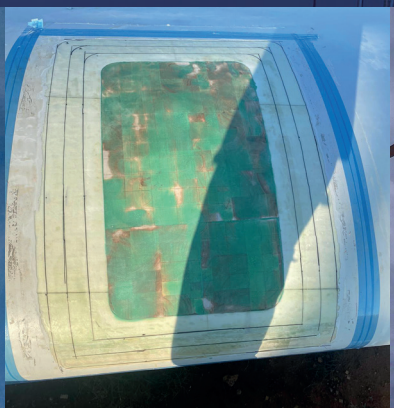
- Leading Edge Erosion at varying stages of degradation
- Retro-Fit leading edge protection
- Gel coat damage
- Laminate damage
- Bonding deficiencies Handling/construction damage
- De-lamination
- Leading Edge Protection fitment and repairs
- Aerodynamic Aids, i.e. Stall strips, Dyno Shell, Dyno Tail and Vortex Generator.
- Damage associated with lightning strikes
- Lightning protection repair.

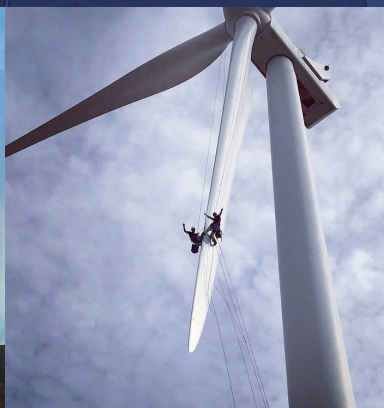
Inspect & Fill

At the request of our clients, our teams can carry out inspect and fill, to minimise mobilisation costs of blade inspection and repairs. This method could be considered where there is an expectation of relatively minor defects and used as an early and light repair to extend the time between more significant repairs.

Documentation & Close Out

Upon successful completion of the repair and inspection, Aventus Energy Quality Team will provide a complete documentation package to our client.





Pre & Post Tower Installation Remedial Works

During the installation of Foundations & Substructures to the erection of the Towers to complete the full installation of each Wind Turbine, it cannot be helped that there is damage during this construction phase. Before end client acceptance, Aventus Energy Management has worked with our client to ensure that all Wind Turbines have been thoroughly inspected and all close-out items are completed to allow for approval and handover.

Our teams undertake the following works:

- Provision of Project Management, Planning and Engineering
- General / Close Visual Inspection
- Complete Documentation and Reporting of Defects
- Preparation and Coating of Paint Defects;
  - Foundation Structure and Substructure
  - External and Landing Platforms
  - Access Ladders
  - J-tubes
  - Internal of Tower
- Electrical and Mechanical Defects;
  - Davit Crane
  - Unistrut and Cable Trays
  - Lighting
  - Sockets
  - Switchgear / Transformers
  - Signs
  - Gratings
  - Anchor Points
  - Bolt Replacement
- Structural Defects
  - Fabrication and Installation of Ladders, Handrails, Gates, Supports, Hinges and Clamps
- Spot-On Metal Repair
- Inspection and NDT
  - Annual Service and STAT inspections
  - LOLER
  - NDT
- Quality Documentation Package and Close Out

Inspection, Repair & Maintenance

With an unrivalled reputation for providing flexible, reactive response and unique problem solving to provide our clients with an Inspection, Repair and Maintenance (IRM) solution for any project or individual onshore/offshore work scopes.

Our experienced management team and technicians offer:

- Project Management, Planning and Engineering
- Surveys / General Visual Inspections (GVI's)
- Protective Coating Condition Survey and Repair
- Blade Inspection and Repair
- Structural Condition Survey and Repair
- Mechanical Inspection and Repair
- Electrical Inspection and Repair
- Hoisting Equipment – Annual Service and STAT inspections
- NDT inspections – General Visual Inspection and Non-Destructive Testing
- Inspection and Protection – Scouring, Marine Growth and Cathodic
- Fabrication
- Diving / ROV

Project Management & Engineering

Our Management Team has extensive experience in providing a complete project management service in multiple Marine Energy Sector Projects.

Our teams can plan and deliver every aspect of a project life-cycle from initiation, planning, implementation/execution, monitoring and controlling to handover and close-out.

We pride ourselves on delivering experienced multi-skilled project teams capable of executing projects on time, on budget, and maintaining the required quality standards expected from our clients.

Using the Aventus Energy Company Values – Knowledge, Discovery, Success – we believe our teams will consistently deliver first-class services and results for our clients.

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