



EXPO FIMER²³

Feria Internacional
de Mantenimiento
de Energías Renovables



THE RENEWABLE O&M'S FAIR IS BACK

March 8 / 9

CONFERENCE PROGRAM

(PROVISIONAL)

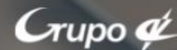
Organizers:



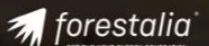
Partners:



LUBRICANTS.
TECHNOLOGY.
PEOPLE.



Access
the
inaccessible*



#EXPOFIMER2023

Wednesday march 8th

MORNING

10:00 - OPENING OF THE EXPOFIMER TRADE FAIR

10:30 - Use of data for early failure detection and root cause analysis

- Aerolastic models for wind turbines and PV plant support structures
- The use of machine learning to determine the health index of PV plants
- Real cases Artificial Intelligence application to Predictive/Prescriptive maintenance in the renewable sector

11:30 - Optimization in the operational phase and "revamping" of renewable plants

- Increased performance by optimizing resources through simulation software and use of best practices
- Revamping as a "plant modernization process" and new innovative concepts such as "Progressive Revamping"
- Improving the profitability of wind farms near the end of their useful life "Partial repowering solutions"

12:30 - The evolution of wind power in the face of technological changes, new architectures, auctions, PPAs, etc.

- Expectations for offshore wind in Spain: is the sector ready?
- PV producers' views on auctions, connection times, financing and PPAs
- Are we able to maintain the evolution of employment in the sector and increase the macroeconomic impact?
- Prospects for storage technologies and use in current projects
- Projects encouraging circular mobility and the strengthening of public-private partnerships in the green economy sectors

Wednesday march 8th

AFTERNOON

16:00 - The logistics and supply of multi-technology components in the face of increasingly restrictive plant shutdowns.

- The importance of production process analysis on supplier products, spare parts and consumables
- Warehouse, transportation and reverse logistics management
- Where are e-business platforms going for the wind turbine aftermarket?
- Second-hand equipment availabilities and warranties

17:00 - The importance of lubrication and hydraulics in renewable farm O&M

- Automatic lubrication options for pinion-crown gears, using adhesive lubricants. Payback period of optimal lubrication systems
- Reverse engineering of hydraulic failures in the field and modifications that improve the performance of existing hydraulic systems
- Lubricant technologies in a wind turbine and sustainability
- WEC (White Etching Crack) within the microstructure of steel in bearings, solutions and the importance of lubrication

Thursday march 9th

MORNING

09:30 – Health and safety comes first (although sometimes we forget)

- Current situation of training in the techniques of rope access work. Plurality and homogeneity of training
- Safety in work on roofs, a pending subject. Work on roofs (without any prior safety installation) carried out in a sufficiently safe way
- Development of special tools, retrofits and lifting systems to improve the maintenance of wind turbines

10:30 – Challenges of equipment life extension for maintenance and repair companies

- The overexploitation of equipment, the difficulties of repairing rotating electrical machinery and its components
- Incident status and repair of transformers and motor windings
- Intelligent braking systems for wind turbine generators, life extensión

12:00 – Physical and digital tools: the renewable O&M revolution and industry 4.0

- Automatic recalibration detection, augmented reality for minimizing operator errors
- The importance of the correct management and monitoring of Data Loggers, for quality data, Artificial Intelligence and predictive maintenance
- Next step in intelligent maintenance platforms. Amortization of investments

Thursday march 9th

MORNING

13:00 - The increasing weight of auxiliary services in OPEX

- The increase in the size of renewable plants and the requirements derived from the PPAs require better testing, verification, repairs, maintenance and comprehensive management of electrical systems.
- Automatic panel cleaning systems to reduce costs, plant shutdowns and occupational hazards
- Drones as a common tool in renewable energy plants
- The evolution of safety systems in PV plants, fire protection and industrial electricity

15:00 - Monitoring 2.0

- Proven methodology for continuous condition monitoring of renewable assets vs. economic and operating efficiency
- Real-time tracking of wind turbine life extension, performance, cumulative fatigue and extreme loads per component
- Early detection and fault diagnosis system based on hybrid models of PV generator characterization parameters

Thursday march 9th

AFTERNOON

16:00 - The component recycling value chain and secondary component markets

- The blade recycling business model
- The existence of secondary markets for wind turbines: fact or fiction
- Reverse engineering of defunct manufacturers
- The recovery of metals from photovoltaic modules
- Difficulties in disposing of recycled products

17:00 - Without flexible and advanced training, no renewable sector goal can be achieved

- New educational schemes in vocational training and masters in the renewable sector
- Interdisciplinary vision of the training needs of technicians in the Renewable Energy Installations Maintenance sector
- Global Technical Practical Training in energized wind turbines with transversal aspects such as risk prevention, environment, continuous improvement and optimization of maintenance processes
- The role of virtual reality in training



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