

Theme 6 : Reliability, monitoring and sensing, O&M

Mini Symposia: Recent progress on lifetime extension, decommissioning, Repowering and Repurposing of onshore and offshore wind turbines

Organised by:



Dr. Abdollah Malekjafarian
University College Dublin



Dr. Cian Desmond
Gavin and Doherty
Geosolutions



Prof. Athanasios Kolios
Technical University of
Denmark

Abstract:

Wind turbines have life expectancy of about 20 to 25 years. Currently, about 28% of the European wind power are currently older than 15 years which means that they will soon reach the end of their designed service life. This clearly shows a significant increase in the capacity reaching its end of lifetime within next 15 years in onshore sector. Therefore, the wind industry needs to prepare for a significant upcoming challenge where an appropriate decision needs to be made about aging wind assets. When a turbine is approaching the end of its lifetime, there are three options available: (1) Lifetime extension, (2) Decommissioning and (3) Repowering. This mini symposia is aimed at bringing together experts from both academia and industry to present their latest developments in novel solutions for decision support tools for end-of-life wind turbines. Topics of interest include, but are not limited to the following aspects:

- Novel structural health monitoring techniques improve the lifetime and reliability of wind turbines.
- Novel techniques to enhance the recyclability and sustainability wind turbines (including foundations and substructures).
- Emerging solutions for overall sustainability of wind energy systems.
- Innovative solutions for recycling and/or re-purposing of wind turbine components.

Abstract Submission:

Please submit your abstracts for your Mini Symposia in the [Abstract Submission Portal](#), by choosing our Title will under the **Themes** section for authors to select. The deadline for submissions is **23rd January 2023**.