



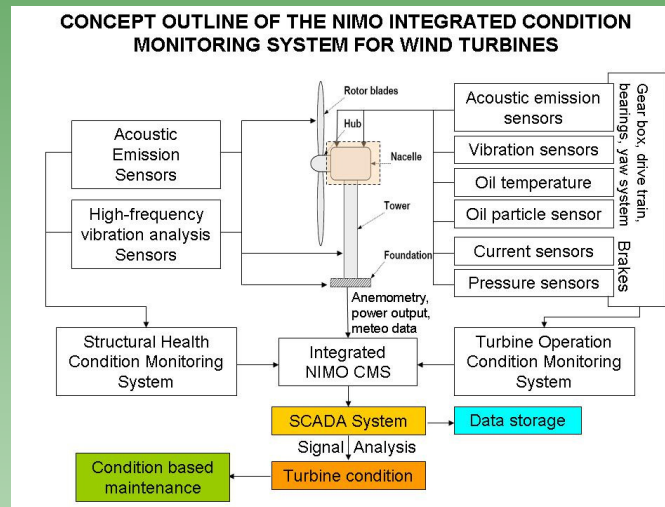
# DEVELOPMENT AND DEMONSTRATION OF A NOVEL INTEGRATED CONDITION MONITORING SYSTEM FOR WIND TURBINES



## About the Project

NIMO seeks to largely eliminate catastrophic failures and minimise the need for corrective maintenance by developing and successfully implementing an integrated condition monitoring system for the continuous evaluation of wind turbines.

NIMO will advance existing state-of-the-art condition monitoring technology used in wind turbines by delivering an advanced system which will be able to reliably evaluate the condition of critical structural components, rotating parts and braking mechanisms.



The continuous growth in wind turbine size and numbers has led to increased demands in inspection and maintenance due to the higher risk of turbine failure. These factors in combination with the fact that wind farms are commonly located at remote sites with poor accessibility or offshore means it is absolutely necessary to practically eliminate the need for corrective maintenance through evolution to preventive maintenance activities.

Furthermore, planned maintenance schedules should be optimised to enable minimisation of the overall operational costs of wind farms when corrective or preventive maintenance are not required.

The successful implementation of the systems and techniques developed within NIMO will assist the European wind energy industry to significantly improve its reliability record by delivering the technology required in order to minimise wind turbine failures and reduce the need for corrective maintenance that results from them.

The achievements and results produced within the NIMO project will have a significant number of positive impacts as it will contribute to the improvement of the wind energy industry with regards to its: a) reliability and efficiency, b) competitiveness in comparison to other power energy sources, and c) sustainable growth.



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[www.nimoproject.eu](http://www.nimoproject.eu)

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