

# New device to reduce wind turbine noise and increase efficiency

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Noise pollution is a big public concern associated with operating wind turbines. A group of European scientists claims to have found a solution to this problem, assembling an innovative device on the blades. They are collaborating with a European project called Windtrust, which aims to reduce the cost of wind energy generation by further improving the reliability of key components of the turbine.

Furthermore, researchers wish to optimise the use of [carbon fibre](#) to build the blades, increase their durability and reduce weight, the aim being to help extend the overall service life of turbines.

At the same time, near Madrid, researchers are testing the so-called "Wind converter," a device that transforms the mechanical energy of the blades into electricity. Technicians wish to maximise the balance between energy generation and machine service life.

Wind power technology engineers are facing a number of challenges: discontinuity of supply due to weather conditions, difficulty of energy storage, impact on the environment, and the high costs of [energy generation](#) and maintenance of equipment. Increasing the effectiveness and durability of turbine components will contribute to a better and more widespread use of wind energy.

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