



Ensemble-based Approach utilizing a Refined Sodar for Wind Energy applications.

AQSystem, Uppsala University, WEPROG and DTU have teamed up and received project funding under the EU Financed Eurostars 3 program. Eurostars is the largest international funding program for SMEs across EU countries wishing to collaborate on R&D projects that create innovative products, processes, or services for commercialization.

In the EARS4WindEnergy project, the partners will collaborate on improving and quantifying the robustness of the AQSystem ground-based remote-sensing SODAR, and also, to improve and validate its measurement of turbulence intensity.

Further, the unique ensemble weather modelling by WEPROG and the SODAR observations will be fully integrated, allowing two new advantages to emerge.

First, the integration will lead to higher prediction accuracy in WEPROG's forecasting products which will enable productivity improvements in existing wind farms O&M, integration of wind power into the electric grid, and trading and balancing of wind power.

Second, the integration will be used in a hind-casting mode to extend the confidence in the SODAR's long-range observations if there are dips in availability.

The new partnership is expected to lead to substantially extended business opportunities for both AQSystem and WEPROG, in a market of strong growth.

