



DATE
August 10, 2023



TIME
09:00—15:00 (UTC+1)



PROJECT LEADER
Physikalisch-Technische Bundesanstalt

WindEFCY Stakeholder Workshop August 10, 2023

GENERAL PROJECT OVERVIEW

Wind turbines must be innovative, have reduced cost and, above all, improved performance in order to assert themselves on the market. Standardised tests and validation methods are particularly important for the performance optimisation, but also for quality assurance. The guideline needed to determine the efficiency of wind turbines on test benches was developed, validated, and practically implemented in a 4 MW and a 10 MW test bench for wind turbine drive trains as part of the interdisciplinary EMPIR project 19ENG08 WinEFCY for the first time.

WORKSHOP AGENDA

- Introduction to the WinEFCY Project
- Traceable mechanical power measurement
- Traceable electrical power measurement
- Traceable efficiency determination of wind turbine drive trains on test benches



Assessment of available power curve (field) and efficiency determination methods (test benches)



Traceable mechanical power measurement in test benches based on torque and rotational speed with a target uncertainty below 1 %



Traceable electrical power measurement in test benches based on synchronised current and voltage measurement



Traceable efficiency determination of nacelles on test benches with a target uncertainty of 1 %



Cooperation and exchange with Stakeholders and dissemination of the research results



Register for this free **ONLINE** Stakeholder Workshop here

<https://www.ptb.de/empir2020/windefcy/information-communication/final-stakeholder-worshop-registration/>

Or contact us via windefcy@ptb.de

