IEA Wind Task 36 Forecasting - Phase II

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Wind power forecasts have been used operatively for over 20 years. Despite this fact, there are still several possibilities to improve the forecasts, both from the weather prediction side and from the usage of the forecasts. The International Energy Agency (IEA) Task on Wind Power Forecasting organises international collaboration, among national weather centres, forecast vendors and forecast users. The Task looks back on the first 3 years, and just started the second three-year period.

Collaboration is open to IEA Wind member states, 13 countries are already therein.

The Task is divided in three work packages: Firstly, a collaboration on the improvement of the scientific basis for the wind predictions themselves. This includes numerical weather prediction model physics, but also widely distributed information on accessible datasets and a benchmark. Secondly, we try to improve the derived power forecasts and deal with forecast vendor related matters to bring the entire industry forward. Thirdly, we will be engaging end users aiming at dissemination of the best practice in the usage of wind power predictions.

The main result of the first phase is the IEA Recommended Practice for Selecting Renewable Power Forecasting Solutions. This document in three parts (Forecast solution selection process, Designing and executing forecasting benchmarks and trials and Benchmark metrics) takes its outset from the recurrent problem at forecast user companies of how to choose a forecast vendor. The first report describes how to tackle the general situation, while the second report specifically describes how to set up a forecasting trial so that the result is what the client intended. Many of the pitfalls we have seen over the years, are avoided.

Other results include a comprehensive review paper on the use of uncertainty forecasts in the power industry and an information portal related to forecasting.

In short, the poster presents the IEA Task 36 on Wind Power Forecasting, opening a forum for international collaboration in this important field for meteorologists, wind power forecasters and end users. For collaboration, please contact the author (grgi@dtu.dk) and see the website at www.ieawindforecasting.dk.