

June 8th, 2022

**Signed a contract with Portuguese Power Company REN;  
Wind power forecast for 4.5GW at 136 sites at 15-minute intervals.  
Weathernews to launch highly accurate Wind Power Forecast  
AI-Based Forecasting Technology Developed in Weathernews France**

**Weathernews Inc.** (Head Office: Chiba, Japan; CEO: Chihito Kusabiraki) has commenced provision of onshore and offshore wind power forecast to European power companies today as a part of WxTech<sup>®</sup> (Weather Tech). This is a weather data provision and solution service designed to promote corporate DX (digital transformation) using weather data and cutting-edge technologies.

This service involves the use of a new proprietary wind power forecasting model based on high-resolution wind forecast data and AI to provide highly accurate wind power generation forecast for each power plant. In keeping with the power trading practices of various companies, prediction data for up to seven days ahead will be provided in 5 –60 minutes increments. The relevant wind power forecasting model is a proprietary forecasting model based on AI newly developed by Weathernews France Service Centre in Paris.

Weathernews' signed a contract for the power generation forecasting service with the Portuguese power company REN (Head Office: Lisbon, Portugal; CEO: Rodrigo Costa) for the company's 136 onshore wind power plants across the country. REN started using the service from April 1 in advance. The total amount of wind-generated power that is supplied throughout Portugal is approximately 4.5GW. Eight companies, participated in the tender, with REN ultimately awarding the business to Weathernews.

Power generation, transmission distribution, and retail businesses that are interested in this service are encouraged to contact us.

Please send inquiries concerning " Wind Power generation prediction service " to:

<https://global.weathernews.com/contact/inquiries-about-our-services/>

## Background

Power transmission companies such as REN supply the electricity generated by wind power generation companies to consumers through their own power grid. It is necessary to grasp the amount of wind power generation flowing into the power grid and the amount of power demand, and maintain the transmission quality by maintaining the balance between supply and demand.

The error between the power supply plan and the power demand plan must be procured from the market or supplemented by the company's preliminary adjustment power. The smaller the difference between the amount of power generation supply and the demand, the less the burden on the operation and cost of the transmission company, so more accurate power generation amount prediction is required. In addition, REN is committed to the sustainable growth of renewable energy supplies such as wind and solar power in Portugal and to decarbonization and reducing environmental burdens as a transmission operator.

In the future, by processing the weather forecast and wind power forecast data provided by the renewable energy power



Wind farm

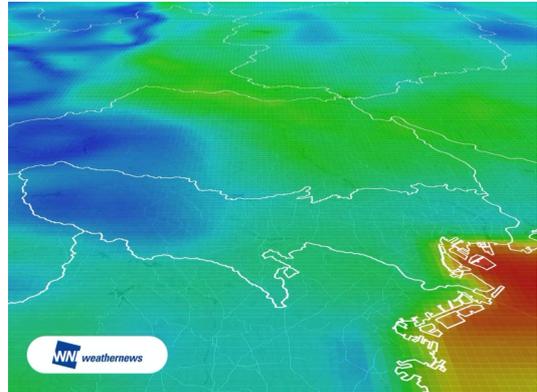
(Image is for illustration purposes)

plant in real time, REN will further improve the accuracy of power generation supply prediction and quality of simultaneous balance between supply and demand and minimizes the suppression of renewable energy. Responding to new regulations that promote these is also a future theme for REN.

Weathernews will continue to work with REN to improve wind power forecast with high resolution, high frequency, and high accuracy to support these themes.

### Weathernews Begins Sale of New Wind Power Forecast Service in Europe

Weathernews will provide wind power forecast in 5 to 60-minutes increments, as deemed suitable, depending on how each power company operates, based on a wind power forecasting model that utilizes highly accurate wind prediction data and AI. Forecasts will be provided for up to seven days ahead with an update frequency every 5 minutes to 6 hours. We will provide highly accurate wind power forecasts for each power plant by having AI learn the latitude and longitude of the power plant, as well as the amount of electricity that the plant actually produced over the past several years together with analytical data for the corresponding conditions.



An image of 1km-mesh wind velocity data in Tokyo

Accuracy is further enhanced by using high-resolution wind direction and speed prediction data for 60 to 200 meters above ground level and entering the relevant values into the wind power forecasting model. The optimum prediction data are selected from an ensemble (aggregate) of those gathered from 5km to 10km-mesh models of various countries as well as Weathernews' proprietary quantitative prediction model. This new wind power forecasting model has been developed by Weathernews France SAS in Paris.

Weathernews will support electric utility companies mainly from three perspectives: the adoption of wind and solar power and other renewable energy as the main sources of electricity, optimization of the supply-demand balance dispatch for grid operation, and the securement of backup power sources.

### Wind Power Forecast Service Specifications

Data Type	Wind Power Generation Forecast
Unit	kWh
Temporal Resolution	5 - 60 minutes interval (up to seven days ahead) * Forecast are provided at the temporal resolution suitable for your power trading period.
Update Frequency	Every 5 min to 6 hours
Provision Format	Provision of data files FTP, API

It is also possible to verify accuracy prior to the adoption of the service using the information and past power generation data for RE power plants. Please use the link below for inquiries on this service and accuracy verification.

<https://global.weathernews.com/contact/inquiries-about-our-services/>