RENEWABLE ENERGY TODAY & TOMORROW

THANKS TO INNOVATIVE WEATHER SOLUTIONS



YOUR CHALLENGES

OUR SO



INTEGRATION OF FLUCTUATING RENEWABLE ENERGY INTO THE ELECTRICAL POWER GRID





ANTICIPATION OF DEACTIVATIONS AS PART OF FEED-IN MANAGEMENT

RENEWABLE ENERGY

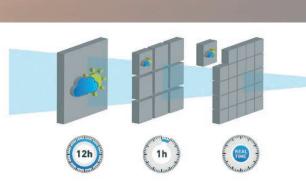
- Highly precise wind, solar and hydropower forecasts
- One-of-a-kind feed-in management solutions
- Long-term feed-in comparisons for wind and solar
- Long-term MCP corrections of wind measurements



FORECASTS FOR ELECTRICITY GENERATED FROM RENEWABLE ENERGY WITHIN DIRECT MARKETING **ACTIVITIES & TRADING**



PLANNING SAFE MAINTENANCE AND SERVICING WORK



WEATHER DATA

- Long-term meteorological energy re-analysis data covering many years
- Highly precise weather forecasts (model output statistics)
- Wind, global radiation, precipitation

- High resolution weather analyses in real time (HYDRA)
- Dedicated, highly precise short-term weather model (RACE)



TAKING INTO ACCOUNT OF RENEWABLE ENERGY **EXPANSIONS IN THE GRID DEVELOPMENT** PLAN

OLUTIONS

WEATHER COCKPIT®

- Highly flexible online representation of weather information
- Live weather data (satellite and radar images, lightning, station data)
- Highly precise weather forecasts for regions and locations
- Hub height wind information
- Customisable work schedule calendar
- Renewable energy and feed-in management forecasts
- Storm and lightning warnings



STORM WARNINGS AND ALARMS

- Our own severe weather centre will keep you informed 24 hours day, 365 days a year
 Warnings
 - Provided by experienced storm meteorologists
 - With individual threshold values
 - Warnings cover all types of storms, sleet, thunderstorms, heavy rain, snowfall

ISO-certified transmission via e-mail, SMS and the Weather Cockpit®

YOUR BENEFITS



Electrical grid: Optimisation thanks to the deployment of renewable energy forecasts and weather data based overhead power line monitoring



Feed-in management: Real time data and deactivation forecasts



Direct marketing: Minimisation of compensation energy costs thanks to highly precise portfolio forecasts (neuronal networks)



Marketing in compliance with the German Renewable Energies Act (EEG) – optimisation of the EEG allocation account thanks to improved performance forecasts



O&M optimisation – thanks to user enhanced data preparation in the Weather Cockpit®



Grid development plan: Optimum planning basis thanks to comparable long-time series



Precise location and cost effectiveness planning thanks to wind potential analyses



CONTACT

GLOBAL HEADQUARTERS UBIMET GmbH ARES Tower Donau-City-Straße 11 1220 Vienna Austria T +43 1 263 11 22 0 E info@ubimet.com

AUSTRALIA

UBIMET Pty Ltd Level 20, 350 Queen Street Melbourne VIC 3000 T +61 3 8488 7610 E australia@ubimet.com

GERMANY

UBIMET GmbH Schönfeldstraße 8 76131 Karlsruhe Germany T +49 721 663 23 0 E germany@ubimet.com

USA

UBIMET North America Inc. 218 West 18th Street New York, NY 10011 T +1 1 646 690 4203 E usa@ubimet.com

ABOUT UBIMET

UBIMET is a leading commercial provider of precise meteorology services and severe weather warnings. The global company is headquartered in Vienna, Austria and has offices in Karlsruhe, Melbourne, Munich, New York and Zurich employing 250 staff from 25 nations. UBIMET provides high-quality meteorological data, forecasts and alerts enabling weather-dependent industries around the globe to increase safety and efficiency.

UBIMET's expertise and reliable weather solutions have convinced customers from industries such as aviation and rail, construction, energy, insurance, media as well as event organizers. UBIMET has delivered accurate weather data to Formula 1 since 2014, and our services are widely used by the Australian Sailing Team, PGA, FFA and other major sports organisations.

The company was founded as a start-up by Michael Fassnauer and Manfred Spatzierer in Vienna in 2004. The two founders, driven by a passion for meteorology, are still the driving force behind the company today. Red Bull has been a strategic partner since 2012, expanding the company's global reach.

www.ubimet.com

To accommodate the exacting demands of the energy industry, UBIMET offers:

INDUSTRY-SPECIFIC KNOW-HOW

- Over 20 experts dedicated entirely to the energy business in Karlsruhe
- The company invests more than 25% of its annual revenues in international research projects in the fields energy & mobility, smart cities and disaster management

HIGH PRECISION METEOROLOGY

- One of the world's largest weather databases (weather stations, satellites, radar, lightning)
- Access to the world's leading and global weather models (incl. ECMWF and GFS)
- Own, high resolution local weather model RACE (precision up to 100 m)
- Own 24/7 severe weather centre
- Protected method for feed-in management volume forecasts

ULTRA-MODERN TECHNOLOGICAL INFRASTRUCTURE

- Six global data centres providing more than 70 TB of processed data per day (big data)
- Our Weather Cockpit[®] provides intuitive and state-of-the-art platform solutions
- Full weather data integration into customer systems thanks to modern API solutions

GROUP MEMBERS

MeteoNews AG Siewerdtstrasse 105 8050 Zürich Switzerland T +41 43 288 40 50 E kontakt@meteonews.ch nowcast GmbH Albert-Roßhaupter-Straße 43 81369 München Germany T +49 89 552 97 13 70 E info@nowcast.de www.nowcast.de