

# News Release

## Wind energy on telco towers: Vantage Towers launches first mobile radio station with wind turbines

- North Rhine-Westphalia state government creates ideal framework conditions for the installation of micro wind turbines
- Inauguration ceremony with Mona Neubaur, Minister of Economic Affairs and Climate Protection and Deputy Minister President of the State of North Rhine-Westphalia

**Düsseldorf, 01 September 2023** - Vantage Towers, a leading tower company in Europe, has joined forces with Berlin-based wind energy start-up MOWEA to equip the first cell tower with micro wind turbines in Troisdorf, North Rhine-Westphalia. A total of eight turbines were installed at a height of 40 meters on the 70-meter-high steel lattice tower, which together produce around 7 MWh per year at average wind speeds. As part of the cooperation with MOWEA, a total of 752 micro wind turbines are planned to be installed at 52 Vantage Towers sites in Germany. Taking into account the varying wind conditions at the sites, the maximum power generation capacity of the 752 turbines is around 650 MWh per year. The generated energy is consumed directly on site and will only be fed into the mobile communications systems of Vantage Towers' customer and mobile network operator Vodafone. The aim of the cooperation is to help reduce overall resource consumption. On days with optimal wind conditions of between 8.5 and 11 meters per second, the turbines can cover up to 100 percent of the current energy demand at the sites. In the long term and in combination with other renewable energies such as photovoltaics, the small wind turbines can also be used in the future for the self-sufficient power supply of mobile phone stations that are not connected to the power grid. To mark the launch, Vantage Towers is hosting an on-site inauguration ceremony in Troisdorf today, attended by Mona Neubaur, Minister of Economic Affairs and Deputy Minister President of the State of North Rhine-Westphalia, as well as numerous representatives from business and politics.

**Mona Neubaur, Minister for Economic Affairs and Climate Protection and Deputy Minister President of North Rhine-Westphalia:** "The project shows: The expansion of mobile communications and renewable energies can be a 'perfect match'. By installing wind turbines on telco towers, the mobile networks can become a bit more self-sufficient. This is a strong and innovative signal. In North Rhine-Westphalia, the state government is particularly committed to expanding wind power and mobile networks more quickly. Thinking about and promoting both together offers great opportunities, especially in rural regions. This can make an important contribution to achieving both climate protection goals and nationwide mobile phone coverage."

**Christian Sommer, Chief Legal Officer at Vantage Towers:** "Vantage Towers has already been operating its infrastructure entirely with grid electricity from renewable energy sources since 2021. Generating green power directly at our sites is therefore the next logical step on our path to decarbonizing the telecommunications sector. With more than 84,000 sites in Europe, we already have the necessary infrastructure to set new standards among tower companies with

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MOWEA's micro wind turbines. We are delighted that the state government in North Rhine-Westphalia has recognized this potential and created the right framework conditions for a fast and unbureaucratic roll-out."

**Dr. Till Naumann, CEO & Founder of MOWEA:** "More and more mobile data is being consumed worldwide. Even if antennas become more efficient, the overall energy consumption increases. By installing our flexibly deployable modular wind turbines on Vantage Towers' infrastructure, together we are making an important contribution to the energy transition. Together we want to make mobile communications greener. Every square metre of space and every kilowatt hour counts in meeting the ever-increasing demand for energy. That's why we need an innovation like ours, which makes wind energy usable on site without additional use of land."

In view of the energy transition, MOWEA's wind turbines on Vantage Towers' infrastructure bring a number of advantages: They can be installed modularly in various designs even in places where conventional wind turbines cannot fit. At the same time, no additional infrastructure is needed to install the turbines, which further minimizes resource consumption. The framework conditions for installation are particularly favorable in North Rhine-Westphalia: According to the state building code of North Rhine-Westphalia, small wind turbines are legally exempt from planning procedure, unlike in many other federal states, and therefore do not require an additional building permit.

At Vantage Towers' sites, either eight or 16 such turbines are installed per tower, with the number of turbines essentially determined by two factors: First, the actual energy consumption on site is relevant, and second, the existing static conditions as well as site-specific factors such as wind quantity and wind speed are taken into account. There are currently no plans to feed surplus energy into the power grid. [End]

### About MOWEA

Modulare Windenergieanlagen GmbH (MOWEA) is a spin-off of the Technische Universität Berlin and is the first company to combine micro wind turbines into a modular and intelligent wind energy system. MOWEA's micro wind turbines can be flexibly integrated into existing infrastructures such as radio masts, bridges, light poles or construction cranes. Each turbine has its own individual power electronics and control logic. MOWEA's micro wind turbines have two blades and have a rotor diameter of 1.7 m. Data from the turbines is constantly monitored remotely via sensors and important operating data is transmitted to the MOWEA Cloud and evaluated. MOWEA is supported by the Vodafone incubator Vodafone Uplift as part of the "Wind Powered Radio Tower" project with Vantage Towers AG.

### About Vantage Towers

Vantage Towers is a leading tower company in Europe with more than 84,000 sites in ten countries, connecting people, businesses and devices in cities and rural areas. The company was founded in 2020 and is headquartered in Düsseldorf.

Vantage Towers' portfolio includes towers, masts, rooftop sites, distributed antenna systems (DAS) and small cells. By building, operating and leasing this infrastructure to MNOs or other

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network providers such as IoT companies or utilities, Vantage Towers is making a significant contribution to a better-connected Europe.

While already 100% of the grid electricity that Vantage Towers uses to operate its infrastructure is obtained from renewable energy sources, green energy generation is piloted directly on site with the help of solar panels and micro wind turbines, and also hydrogen solutions are under testing. This fits well into the overall strategy of the company to drive a sustainable digitalisation in Europe and to support partners through technological innovation in decarbonisation and achieving their climate goals.

For more information, please visit our website at <https://www.vantagetowers.com/en>, follow us on Twitter at @VantageTowers or connect with us on LinkedIn at [www.linkedin.com/company/vantagetowers](http://www.linkedin.com/company/vantagetowers).

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