

Press release

Test passed – RWE successfully implements new technologies for more sustainability in wind power

- **Commissioning of Orkoien onshore wind project in Spain**
- **Technologies successfully tested for less environmental impact: Plastic mats minimise construction-related impact; SF6-free switchgear to avoid the use of greenhouse gas**

Essen, 9 October 2023

RWE leads the way in promoting sustainability in wind power. Near Pamplona, Spain, the company has now commissioned its groundbreaking onshore wind project Orkoien. Over the last 14 months, RWE has constructed a 5.7-megawatt onshore wind turbine. At the same time it tested two innovative technologies to reduce environmental impact during the plant's construction phase on the one hand and greenhouse gas emissions during its subsequent operation on the other. Both technologies have been implemented successfully.

Katja Wünschel, CEO RWE Renewables Europe & Australia: “More green electricity produced even more sustainably. That is what we are working towards. At Orkoien our team has shown what smart engineering solutions can achieve. We take these learnings and plan to apply them to other projects as well. This fits perfectly with our strong sustainable growth strategy, both here in our core market Spain and globally.”

Testing two new technologies

During the construction phase, **special plastic mats** were used for the first time in Spain. The great advantage they offer is that, in temporary work areas such as access roads and storage sites they minimise the construction-related impact on the soil. Normally, these areas are excavated and gravelled, but now, only the surface needs to be smoothed using the excavator. Then the access and storage areas are temporarily covered with the plastic overlays. Once the work is over, the vegetation can regenerate completely. Another advantage is that the mats, which are partly made of recycled material, can be reused in other projects.

Robert Navarro, President and CEO RWE Renewables Iberia: “The plastic mats surpassed our expectations. During the construction of Orkoien we faced harsh weather conditions with heavy rains and flooded soil. Nevertheless, we had secure access roads for the installation of the wind turbine. That is why the mats are now part of our construction toolbox for upcoming projects.”

RWE

The second technology, which has been used for the first time in the Orkoien pilot project, avoids the use of a greenhouse gas. In the medium-voltage switchgear at the base of the turbine tower, the use of an insulating agent in the circuit breaker is necessary to interrupt the electrical currents by cooling and extinguishing the arc that occurs when a circuit is opened. Until now, the gas SF6 (sulphur hexafluoride), which is neither toxic nor flammable, has been used for this purpose. However, SF6 is a greenhouse gas that would impact the climate if it escaped into the environment. Therefore, it may only be used under strict conditions. With the use of “**SF6-free switchgear**”, RWE tested an alternative. This new technology relies 85 percent on dry air and 15 percent on C5 fluoroketones as an insulating agent. In addition to being environmentally friendly, the technology has the same technical reliability as SF6. RWE is thus also preparing for the SF6 ban announced by the EU for new plants from 2031.

RWE Renewables Iberia – a key driver of the Spanish energy transition

Orkoien further strengthens RWE’s onshore portfolio in Spain. The company now has onshore wind farms with a total capacity of around 500 MW in operation in the country. In addition, RWE is further growing its solar business – recently the company has commissioned three new solar farms [Las Vaguadas](#), [Casa Valdes](#) and [Puerta del Sol](#) and has started construction on its 92 MWac [Gazules](#) project in Andalusia. After the commissioning of this project, RWE will operate a solar capacity of around 250 MWac in Spain.

Building on its long-established onshore and solar business, RWE is now keen to step into the Spanish offshore market together with its partner [Ferrovial](#). The two partners plan to jointly develop, construct and operate floating offshore wind farms off the Spanish coast.

For further enquiries:

Viola Baumann
RWE Spokesperson
T +49 (0) 152 57909343
E viola.baumann@rwe.com

Pictures of Orkoien for media use are available at the [RWE Media Centre](#) (credit: RWE).

RWE

RWE is leading the way to a green energy world. With an extensive investment and growth strategy, the company will expand its powerful, green generation capacity to 50 gigawatts internationally by 2030. RWE is investing more than €50 billion gross for this purpose in this decade. The portfolio is based on offshore and onshore wind, solar, hydro power, hydrogen, batteries, biomass, and gas. RWE Supply & Trading provides tailored energy solutions for large customers. RWE has locations in the attractive markets of Europe, North America, and the Asia-Pacific region. The company wants to phase out coal by 2030. RWE employs around 19,000 people worldwide and has a clear target: to get to net zero by 2040. On its way there, the company has set itself ambitious targets for all activities that cause greenhouse gas emissions. The Science Based Targets initiative has confirmed that these emission reduction targets are in line with the Paris Agreement. Very much in the spirit of the company’s purpose: Our energy for a sustainable life.



Forward-looking statements

This press release contains forward-looking statements. These statements reflect the current views, expectations and assumptions of management, and are based on information currently available to management. Forward-looking statements do not guarantee the occurrence of future results and developments and are subject to known and unknown risks and uncertainties. Actual future results and developments may deviate materially from the expectations and assumptions expressed in this document due to various factors. These factors primarily include changes in the general economic and competitive environment. Furthermore, developments on financial markets and changes in currency exchange rates as well as changes in national and international laws, in particular in respect of fiscal regulation, and other factors influence the company's future results and developments. Neither the company nor any of its affiliates undertakes to update the statements contained in this press release.

Data Protection

The personal data processed in connection with the press releases will be processed in compliance with the legal data protection requirements. If you are not interested in continuing to receive the press release, please inform us at Datenschutz-kommunikation@rwe.com. Your data will then be deleted and you will not receive any further press releases from us in this regard. If you have any questions about our data protection policy or the exercise of your rights under the GDPR, please contact datenschutz@rwe.com.