

## INFORMATIVE NOTE

Supporting solutions based on the findings of Norwegian research and the experience of French airports will allow renewable facilities to coexist in harmony with nature

### Iberdrola is painting wind turbine blades black and applying vinyl shapes resembling eyes to protect birdlife

- **Painting one of the three blades black on several wind turbines on the Cavar (Navarre) and Zorreras (Zahara de los Atunes, Cádiz) projects and installing vinyl shapes that resemble eyes on more than 60 towers on wind farms in Burgos**
- **According to scientific research and international experience, initiatives like these reduce the number of birds frequenting these areas by 70%**

Iberdrola is continuing to roll out solutions to promote the coexistence of its renewable facilities, one of the foundations of the energy transition, and the ecosystems in which they are located. The company has launched two initiatives on several wind farms to improve the visibility of their wind turbines and to deter certain species of birds from the areas of influence around the projects. The solutions are based on studies conducted by Norwegian research centres and experiences at French airports.

One such initiative involves painting one of the three blades black on several wind turbines on wind farms in Cavar (111 MW) in Navarre; and Zorreras (20 MW) in Zahara de los Atunes (Cádiz) in Andalusia. The project, which will be rolled out in some of the company's other wind farms, is based on a study published by the Norwegian Institute for Nature Research, which estimates a 70% reduction in the number of birds spotted after applying this measure. The solution creates more contrast between the blades and makes them easier for birds to see.

This work to adapt the wind turbines takes place 100 metres above the ground on fully assembled wind turbines and requires sanding, cleaning and painting the blades. The tasks are undertaken when there is little wind and no rain to ensure the safety of the specialised wind turbine maintenance and operation workers. Each blade on the Cavar wind turbines is 65 metres long and up to 14 metres wide, so it can take a week to paint them.

#### Vinyl shapes have been applied to more than 60 towers on seven wind farms to discourage birds of prey

The second of these initiatives consists of marking wind turbine towers with two vinyl transfers that look like staring eyes. These one-metre-diameter concentric circles are fixed at between 3.5 and four metres from the base of the wind turbines. It has been shown that sticking these black shapes to the white base of the wind turbine tower is a deterrent to birds of prey.

The solution has been implemented in seven wind farms in Burgos and has involved applying these vinyl shapes to more than 60 wind turbines on the Ballestas-Casetona, Cotera, Páramo Vega, Urbel del Castillo, Valdeporres, Viñas and Fuente Blanca wind farms. The project does not affect the structure of the wind turbine and has no impact on the operational systems or electricity produced by these production plants.

There are plans to install these vinyl shapes at another six wind farms in Burgos province, while the possibility of further extending the scheme is being analysed.



## INFORMATIVE NOTE

This method has been tried and tested at Lourdes-Tarbes-Pyrénées airport in south-eastern France and has proven efficient for keeping birds away. A 65% reduction in the number of birds of prey spotted in the airport area was observed when the vinyl shapes were used.

### Competitive energy and environmental balance

Iberdrola has fully integrated the conservation of the biological diversity of ecosystems into its strategy, demonstrating that competitive, clean and sustainable energy supply can effectively coexist in balance with the environment.

The company plans to achieve “no net loss” of biodiversity by 2030, by committing to the net positive impact of new infrastructure developments. In this regard, it has carried out more than 1,450 measures to protect biodiversity in the last three years alone, combining renewable project development with the conservation of the biological diversity of ecosystems and caring for flora, fauna and natural heritage.

Among other initiatives to achieve its sustainability goals is reforestation, with the launch of the [Trees Programme](#), whereby Iberdrola will plant 20 million trees by the end of the decade, with which it will capture approximately six million tonnes of CO<sub>2</sub>.

### About Iberdrola

[Iberdrola](#) is one of the world's principal energy companies, a leader in renewables, and it is spearheading the energy transition towards a low-emission economy. The group supplies energy to around 100 million people in dozens of countries and has renewable, grid and commercial activities in Europe (Spain, the UK, Portugal, France, Germany, Italy and Greece), the US, Brazil, Mexico and Australia, while counting markets including Japan, Ireland, Sweden and Poland as growth platforms.

With a workforce of more than 37,000 and assets of over €122.5 bn, it recorded turnover in excess of €33 bn and net profit slightly exceeding €3.6 bn in 2020. The company contributes to the maintenance of 400,000 jobs in its supply chain, with an annual procurement budget of €14 billion. A leader in the fight against climate change, Iberdrola has committed more than €12bn over the last two decades to building a sustainable energy model based on sound environmental, social and governance (ESG) principles.

