Fact Sheet
Company Information and products

Company Information: ProTecBird GmbH

ProTecBird is a German AI technology company specializing in environmental protection related to birds. The company combines ornithological expertise with technical know-how to serve a rapidly growing market. The technology startup was founded in November 2021 in Husum.

ProTecBird offers innovative product solutions based on Artificial Intelligence (AI) for the renewable energy, aviation, and industrial sectors:

- Protection of birds from collisions with wind turbines to support the acceleration of renewable energy expansion on land and at sea.
- Increasing flight safety by protecting aircraft during takeoff and landing from bird strikes.
- Protection of industrial buildings, power plants, offshore installations, and football stadiums from contamination and damage caused by birds.

From Startup to Scale-Up

In 2024, ProTecBird successfully transitioned from a startup to a scale-up company. Under the leadership of CEO Thorsten Heinzen, the company, with a rapidly growing team of now 17 highly qualified full-time employees and 30 freelancers, has laid the foundation for rapid growth. In addition to highly demanded, market-ready product innovations, an efficient industrial organization was established, and expansion into international markets was successfully initiated. Industry leaders in wind energy, aircraft manufacturing, airport operations, industry, and Bundesliga football stadium operators have already been acquired as customers for the AI-based products.

Products of the AVES Family

AVES Wind Anti-Collision System
The AVES Wind Anti-Collision System allows wind turbines to be put into a standby mode as needed to protect large birds, such as red kites or sea eagles. This system is based on a highly integrated camera system, detection and tracking software, and AI for reliable species identification.

AVES Wind Monitoring
With the use of the stereo camera-based bird detection system, AVES Wind Monitoring enables detailed monitoring and analysis of bird migration within the impact area of individual wind turbines in offshore wind farms.

AVES Wind High Precision Counter
The AVES Wind High Precision Counter utilizes advanced AI technologies to accurately detect and count bird migrations. This system is specifically designed for use in offshore wind farms, allowing for the efficient and reliable fulfillment of regulatory requirements.

AVES Analytics
AVES Analytics provides a powerful platform that supports wind farm operators in the efficient analysis and visualization of large datasets. By using advanced tools, the data collected from the AVES product family—including the AVES Wind Anti-Collision System, AVES Wind Monitoring, and AVES Wind High Precision Counter—can be consolidated. This enables informed decision-making and provides comprehensive insights.

AVES Airport
Using state-of-the-art AI-based technology, we protect aircraft during takeoff and landing from bird strikes. AVES Airport is designed to automatically detect birds and effectively deter them from runways both day and night.

AVES Industry / AVES Stadium
Protection of buildings and facilities in the industrial, agricultural, and energy sectors, as well as stadiums and sports venues, from bird strikes, damage, and contamination caused by birds. Thanks to the precise sensors and AI-based tracking software used, it is possible to deter individual birds as well as entire flocks.