

Windstreek: Animal-friendly and sustainable broiler farming



Intro to Good Practice

The Windstreek broiler house was developed by Dutch farmer Robert Nijkamp in collaboration with Wageningen University and the Plukon Food Group. The goal is to create a husbandry system "designed from the chicken's perspective" – with a focus on animal welfare, climate protection, and economic viability. The house measures 95 × 22 meters, is up to 11 meters high, and holds around 26,000 slower grown birds per cycle at a maximum stocking density of 25kg/m². The system meets the requirements of the Beter Leven label with one star. There are approximately 5.6 cycles per year. The birds reach a slaughter weight of 2.4 kg after 8 weeks.



Source: <https://www.compassioninfoodbusiness.com/>

A central feature of the system is the so-called "brooders": heated retreat areas equipped with infrared heaters, water and feed supply, and perches. They replace full-house heating and additionally make use of the birds' body heat. The brooders are used by the chicks for approximately 2.5 weeks. The house has large window surfaces – covering 50% of the floor area – allowing daylight to enter and creating a natural light environment. Structural enrichment such as straw bales, elevated platforms, and daily feed scattering promote natural behaviors like scratching, pecking, and resting. Ventilation is fully natural and sensor-controlled, automatically adjusting to indoor and outdoor temperatures as well as humidity. This significantly reduces CO₂ and fine dust levels.

Background & challenges

The first Windstreek broiler house was initially more expensive than a standard house due to development costs and built-in safety features. However, some additional elements, such as underfloor heating, proved to be unnecessary. In the meantime, the concept can be implemented at costs comparable to other higher-welfare housing systems. Production costs are roughly in line with standard production, as higher feed costs are offset by energy savings.



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Additional information

The Plukon Food Group handles slaughtering and processing. The meat is marketed through the supermarket chains with 1 star-Beter Leven on the packaging. Some meat is also marketed directly.



source: <https://www.compassioninfoodbusiness.com/>

The “brooders” in the Windstreek broiler house are covered retreat areas equipped with heating, lighting, water, and perches, providing the chicks with warmth and protection. They remain in the house throughout the entire production cycle and are automatically ventilated and heated. Their compact design also captures the birds’ body heat, contributing to an 80% reduction in energy use compared to conventional houses.



source <https://www.compassioninfoodbusiness.com/>

Benefits

Windstreek requires around 80% less energy than a conventional broiler house. Its entire energy demand is met through solar power. Ammonia emissions have been reduced by over 60%, and fine dust emissions by 85%. CO₂ savings amount to more than 3.6 kg per bird per year.

A slow-growing breed (Hubbard JA 757) is used. No antibiotics have been administered to date. The birds show good health, with very low incidence of footpad issues and a stable barn climate throughout the rearing period.

Experience from practice

The system demonstrates that combined animal welfare measures can be economically viable. A close collaboration between farmer, marketer, and technical partners is crucial. Flexible management and precise climate control are key success factors.



Source: <https://www.compassioninfoodbusiness.com/>

More Information:

<https://www.youtube.com/watch?v=9POJhunxxdA&t=1s>

<https://www.compassioninfoodbusiness.com/media/7429131/windstreek-broiler-house-case-study.pdf>

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