




## Navigating Nitrogen: The Challenges

 Nitrogen emissions or more specific nitrogen deposition, arising from farming practices and fossil fuel combustion, have emerged as a formidable challenge.

Stringent regulations, designed to safeguard air quality and protect sensitive habitats, have prompted farmers to navigate a complex regulatory landscape. Dutch livestock farmers find themselves at the forefront of a multifaceted battle: sustaining their livelihoods while addressing the urgent issue of nitrogen emissions.

Luckily, an increasing number of innovative technologies, insights and best practices are being developed that can be used in modern poultry farming to address emissions. The ECO Air Care solution has been developed by the Vencomatic Group and actively removes nitrogen from the stale air. The Eco Air Care units clean the outgoing air by flushing it with process water containing sulfuric acid. The process water captures the emissions of ammonia, particle matter and odour.

This flushing water is collected in

a silo and can be used on the farmland as a substitute for fertilizer and thereby contribute to circular farming. Poultry farmers are pleased not only with the demonstrably improved results in their flocks due to better air quality but also because it has been proven that 90% of the nitrogen is removed from the outgoing air.

The ammonia levels (which consist of more than 80% nitrogen) are removed from the air and are measured continuously with ammonia sensors.

This means that thousands of kilograms of nitrogen can be captured per barn per year. In the first ECO Air Care barn installation in the Netherlands, we have evidence: 7,000 kg of nitrogen was captured annually, enough to offset the construction of a thousand new homes!

Nitrogen reductions continue to challenge the Dutch farmers, industry, and political environment. Innovations like these will hopefully help to contribute ways towards a sustainable tomorrow. Discover more about the Vencomatic ECO Air Care.

[Vencomatic.com](http://Vencomatic.com)

## Update to the Aviapp platform



During a health monitoring session on the farm, it is very important to correctly interpret the obtained values. To further help poultry producers with this evaluation, Huvepharma has introduced the expected values in Aviapp.


The expected value is the average coccidiosis score at a certain age of the birds, month of

the year, and country. This data is presented visually in Aviapp, showing the evaluation of the coccidiosis pressure in your flock against the expected value (long-term average).

With the addition of expected values to the Aviapp platform, we can now offer Aviapp users extra feedback and insights which can be used instantly to improve the performance of their flock.

[huvepharma.com](http://huvepharma.com)

## Capture and destroy airborne pollutants

 For the first time, farmers can capture and then destroy air contaminants using the BioOx Air Cleaning System.

BioOx Air Cleaning Systems, a system which captures and destroys airborne pollutants, today announces the launch of its patented biological technology for farmers.

BioOx Air Cleaning Systems uses the power of bio-oxidation, and there is not a single HEPA, UV or ionic based system on the market that offers complete localised air decontamination like BioOx.

While other systems struggle to filter out 0.3 microns, our bio-reactors offer complete contaminant destruction down to the 0.0001 microns and can clean air in large square footage facilities, such as poultry houses and other facilities used in animal agriculture.

"Our strategy is to use the existing,

natural way the planet cleans itself and apply it and bring it indoors to where animals are, where people are, as well as open-air farms, that is our main goal," Dr Sam Sofer told International Poultry Production.

In our clinical test, we saw our Air Cleaning Systems had a significant impact on reducing the chicken mortality rate. Overall, the house which used our BioOx Air Cleaning System saw a 32% reduction in mortality over the control house without BioOx in our study.

In our comprehensive, 20-day study with 20,000 chickens per house, the house with the BioOx Air Cleaning System running saw a 48% reduction of measured ammonia with the same vent time and vent box opening as the control house without our Air Cleaning System (both houses were identical in age and size).

[bioox.us](http://bioox.us)



## Aviagen's update now available



Aviagen is pleased to introduce its latest publication, "Decades of Breeding for Welfare and Sustainability." This extensive update shines a light on the steady advancements Aviagen has made over the years.

Balanced progress in the breeding program has translated into continuous improvements observed in the field. Breeding for welfare and sustainability is not a final destination, but an ongoing journey, promising a

continuous strengthening of bird health, welfare, efficiency, and sustainability. Explore Aviagen's leading-edge selection techniques that leverage the latest innovations in our breeding programs.

Most importantly, the publication highlights the inseparable connection between bird welfare and sustainability.

These two vital aspects combine to ensure economic prosperity for poultry producers and contribute significantly to the preservation of the planet.

[Aviagen.com](http://Aviagen.com)

