Norsk Kylling: A case study for the future of broiler chicken production



The new standards for broiler chicken production

The European Chicken Commitment is a pledge committing its signatories to introduce higher welfare standards for broiler chickens across their production and supply chains. In Europe, over 350 companies have committed to this pledge, including key brands such as KFC, Unilever, Nestlé, Danone, Sodexo and 99% of the French retail market. In the United States of America, Canada, the United Kingdom, Australia, New Zealand and more recently Brazil, a similar pledge is known as the Better Chicken Commitment. Over 200 companies have already committed to adopting BCC standards on their production and procurement policies, including brands such as Burger King, Subway, Compass Group and Starbucks.

The company

Norsk Kylling is one of the largest broiler chicken companies in Norway, with a value chain located in the middle of the country. The company has 142 contract farmers, among them parent flocks and commercial broiler farms, in addition to its own hatcheries and processing plant, with advanced technology and welfare standards. In total, Norsk Kylling produces 14.5 million chickens annually. The company is entirely owned by REMA 1000, a



Norwegian discount retailer, and is founded on Environmental Social Governance (ESG) principles, composed of high welfare standards, low environmental impact, social responsibility and core management of values—all this while maintaining the status of the most cost-effective chicken in Norway.

Norsk Kylling has become the first broiler chicken producer to fully comply with the welfare requirements proposed by the European Chicken Commitment. This achievement has opened markets and greatly increased visibility for the company.

Interview with Tor Inge Lien



Chief Operating Officer and veterinarian

Improving the slaughter process

Norsk Kylling's journey toward higher broiler welfare standards started at the last stage in production: the slaughter process. Previously, in 2015, the company noticed issues with electric bath stunning systems, the typical stunning system for poultry slaughter worldwide. Public perception and scientific advances pressured producer-processors in Norway to switch to a more humane method of preslaughter stunning, known as controlled atmosphere stunning, or CAS. The investment was significant, but both Norsk Kylling and REMA 1000 saw a higher risk in not adapting, considering the lack of acceptability of the traditional electric system. Searching for the best system available in Europe, the company found a CAS system that kept the chickens in crates throughout the entire process and stunned them using multistage carbon dioxide instead of a single exposure.

"We didn't want chickens to be tipped from the boxes or transported on belts; we wished to minimize the handling of chickens before the stunning. So, we opted for this design, where the chickens are placed in crates at the farm and don't leave until they are unconscious and ready for the bleeding process."

— Tor Inge Lien

CAS minimizes handling and the process of removing the birds from crates. The inversion and hanging process is completed only after the chickens are unconscious. In addition to the animal welfare improvements, the transition to CAS provided other benefits to the efficacy of the process. The controlled atmosphere stunning allows the staff to spot and quickly remove potential conscious birds leaving the gas tunnel. The staff has a trained officer prepared to quickly euthanize that bird before returning it to the system, therefore eliminating the risk of conscious birds reaching the decapitation stage.



While visiting Norsk Kylling's facilities, Anna Souza, program and policy manager for Humane Society International in Brazil, noted: "The waiting room was almost soundproof, and under blue light the birds were very calm. There was no handling of the birds prior to the entrance on the gas tunnel, and the gradual exposure and stunning was very smooth. The difference from a traditional electric stunning process is beyond comparison. This system offers a much higher level of welfare and efficiency in the preslaughter stunning process for poultry."







Norsk Kylling used a conventional fast-growth breed for years that showed progressively worsening animal welfare results due to leg disorders and ascites. This pushed the company to search for a better way to rear chicken. While searching for the best stunning system available, company officials visited production systems across Europe. In Holland, they visited farms that used slower-growth broiler breeds by Hubbard with fantastic productivity results, and Norsk Kylling was immediately interested in exploring that option.

Hubbard 's JA787 is one of the the breeds studied and approved by the Global Animal Partnership's Better Chicken Project, based on its improved welfare outcomes. While there are other breeds with both moderate and slow-growth rates, the JA787 has been a common choice for producers looking to meet the Better Chicken Commitment requirements.

Soon after, the company imported fertile eggs and raised five trial flocks of Hubbard's JA787, both large and small, to test the breeds and verify that the Dutch example would work in Norway as well.

"We had farmers who usually had bad results for leg disorders and mortality, but with Hubbard they became the top-notch farmers, with Hubbard significantly improving their results. It is a much better breed to work with," Tor Inge Lien remembered.

"We reviewed the numbers and saw that the production was good, and at the same time we saw the increase in animal welfare and the benefits for the farmer's well-being."

— Tor Inge Lien

After the trial flocks, the company embarked on the long process of financial planning. As expected, economic viability was a concern for both Norsk Kylling's headquarters and its contract suppliers. But, according to Norsk Kylling's chief operating officer, the transition to the slower-growth breed didn't increase production costs. "The other requirements from the European Chicken Commitment, especially the lower stocking density, did, but not the breed transition itself," he said. The numbers showed that productivity with the slower-growth breed was good enough for the company to continue thriving financially, which led to the decision to increase the percentage of birds in this new system on the firm's value chain.

Nine flocks later, Norsk Kylling had the same good numbers and productivity, leading the company to move forward with populating breeder farms by introducing two parent flocks.

Once these results proved to be just as successful, the company decided to fully transition to the slower-growth breed in 2018. The transition to a slower-growth breed resulted in many benefits, in addition to the increase in the level of welfare. Due to the breed's performance, the company was able to reduce the number of animals raised while producing the same amount of chicken meat. This was due particularly to the 40% reduction in daily mortality on the farm and 76% reduction in mortality during transport. In addition, producers rear the birds to a higher slaughter weight, sparing over 2.38 million birds annually.

Not only did this benefit production costs, but the company's carbon footprint did not increase, especially due to the increased slaughter weight and decreased mortality. In Norway, Ross broilers are usually slaughtered at 32-33 days of age. Norsk Kylling could not keep the Ross broiler longer than this due to increasing prevalence of ascites with increasing age. Keeping the Hubbard JA787 to 46 days of age increased the productivity considerably.

Another benefit to Norsk Kylling's environmental footprint was the Hubbard JA787's resilience toward changes in feed composition, which allowed the company to explore alternative ingredients with potential to reduce land use, biodiversity impact and consequently its greenhouse gas emissions. Through life cycle assessment, or LCA, the company has demonstrated a 1% reduction on its carbon footprint after transitioning to the new breed.

These strategies and results have demonstrated that even with increased space available per bird, the longer production cycle needed for slower-growing breeds and the higher (worse) feed conversion ratio, the balancing factors (including the reduction in number of animals) have proven that in Norway, a breed with better welfare results can be just as environmentally responsible as a conventional fast-growth broiler chicken.



Environmental enrichment used by Norsk Kylling



Pecking stones



Hay blocks



Platforms

TOS BY ELIN IVERSEN / NORSK KYLLIN



Farmer and consumer perceptions

At first, Norsk Kylling's farmers were hesitant to try the slower-growth breeds. The concept was new, and the premise was scary: slower weight gain and longer production cycles. But soon the first trial farmers started reporting their success and demystified the system. The farmers enjoyed the experience, even reporting that "that was how broilers were supposed to behave in nature," according to Tor Inge Lien. He also remembered the reactions to the initial trials: "We went from getting angry phone calls from farmers who didn't want to change, to phone calls asking why they weren't using Hubbard yet! They saw how good the results were and wanted to switch to slower-growth breeds too."

Since one of the main concerns was the potential cost increase, Norsk Kylling ensured a baseline pay to the farmers transitioning and paid extra for the first two years with the new breed, while on the learning curve for the new system. To this day, this baseline pay is calculated and updated every quarter based on input and production costs, and producers get bonuses depending on productivity results as well. REMA 1000 also played a key role during this process, absorbing the cost impact to relieve the two most sensitive ends of the value chain: the farmer and the consumer.

The retailer worked on marketing the new products, offering the welfare improvements as added value, which increased sales and made this strategy possible. After two years of phasing in and adjusting the production, the cost was back to normal. With these efforts, to this day, Norsk Kylling's product, available in stores under the name Solvinge, is sold at low price in the market.

To promote the new system's products, the company produced commercials, spread posters across Norway and focused on the new welfare improvements. Norsk Kylling's marketing efforts got more consumers to the stores, but it was still a challenge to explain why this chicken was different. The breed transition is a complex and technical issue, hard to fully communicate to a lay consumer assessing different brands on the supermarket's shelf. But the European Chicken Commitment helped with this challenge. "It's easier for the consumer to understand the 'whole welfare package.' Light, space allowance and cages are the most important issues for Norwegian consumers, so these issues are easier to communicate," said Tor Inge. After the full adoption of the European Chicken Commitment requirements, Norsk Kylling developed a label together with Compassion in Word Farming to go on with its products, highlighting its value chain and new welfare improvements.





Recommendations to future producers

Looking back, Norsk Kylling is proud of its journey and reaping the fruits of its efforts. The company reports significant improvements on its productivity results, welfare results and farmer satisfaction. In addition, the compliance with the European Chicken Commitment attracted new buyers seeking high-welfare chicken. "We receive inquiries from Europe, Taiwan, China, wanting high-welfare chicken, but we don't have enough volume to export. And more commitments will come! The first producer, the first one out will have the advantages," said Tor Inge.

Humane Society International

The Humane Society of the United States was a founding member of the Better Chicken Commitment. In 2016, animal protection groups joined together to review the science that had been conducted on the welfare of chickens raised for meat (broiler chickens). While there are many welfare problems to be addressed, those that were assessed to be top priorities were the crowded, barren living conditions in commercial production systems; slaughter methods; and the health and mobility consequences of genetically selecting these birds for rapid growth rates. Since the Better Chicken Commitment was published, Humane Society International (the international division of the HSUS) and many other animal protection organizations have advocated for its adoption all over the world.