



LOOKING FORWARD

Plukon Food Group CSR Report 2017-2018



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Looking forward



Plukon Food Group is a multinational poultry meat producer operating production facilities in the Netherlands, Germany, Belgium, France and Poland. The Group's ongoing development is based on organic growth and acquisitions. Working with our retail partners and industry clients, Plukon Food Group offers a broad range of poultry products and meals with a strong focus on innovation and efficiency.

The years 2017 and 2018 were eventful for the majority of Plukon employees. After a fire destroyed its Wezep site in 2017, Plukon managed to construct, set up and operationalise an all-new building within one year. The facility is based on sustainable design and constructed in accordance with the highest standard (i.e. BREEAM level 5). Plukon Wezep has access to the most state-of-the-art facilities for vegetable processing and meal production.

Plukon inaugurated a new greenfield site in Poland in 2018, in joint venture with the Polish Wyrebski family: Plukon Sieradz. These state-of-the-art facilities are used for slaughter and production on behalf of retail customers and the industrial market. Production volumes are set to increase gradually.

In France, a great deal of time and energy was invested in 2017 and 2018 in restructuring the production facilities, resulting in positive development. In Germany, the 'Initiative Tierwohl' retail concept – which involves keeping animals at lower density levels – continued to achieve market growth in 2017 and 2018.

Across all markets and countries, we continue to observe the trend of consumers increasingly choosing poultry meat products based on convenience and variety, where versatility and flavour are praised alongside the relatively low climate footprint of poultry meat. Consumers are increasingly aware of the footprint when purchasing proteins, and poultry meat scores well in this area.

Plukon responds to this trend with a solid product development and marketing strategy, plus well-equipped production companies. When it comes to consumer products, Plukon Food Group has demonstrated its ability to market a varied range of poultry products by working closely with retailers.

'Plukon Food Group aims to be Europe's most knowledge-driven, efficient and innovative poultry producer.'

Dynamic trends and developments within the Plukon Food Group and beyond compel the organisation to review its business strategy in order to further strengthen its position within the North West European poultry meat industry in order to ensure the continuity of the company and its supply-chain partners. Sustainability constitutes an integral part of this strategy. Plukon Food Group aims for a balance between people, animals, the environment and profitability, with an express focus on circularity, food safety, animal health and employees who all make their own individual contribution in these areas.

This report contains an account of Plukon's sustainability policy during the years 2017 and 2018 and forms the compass guiding the company in the foreseeable future.

Peter Poortinga
CEO Plukon Food Group

Responding quickly to social trends strengthens Plukon's position and ensures continuity for supply-chain partners such as broiler farmers.

About the Plukon Food Group

The Plukon Food Group is one of the biggest players in the European poultry market, supplying chicken and turkey products and ready meals to leading European food partners. With 18 sites spread across five countries and employing nearly 6,500 people, we play a leading international role when it comes to translating customer needs into innovative products and farming solutions.

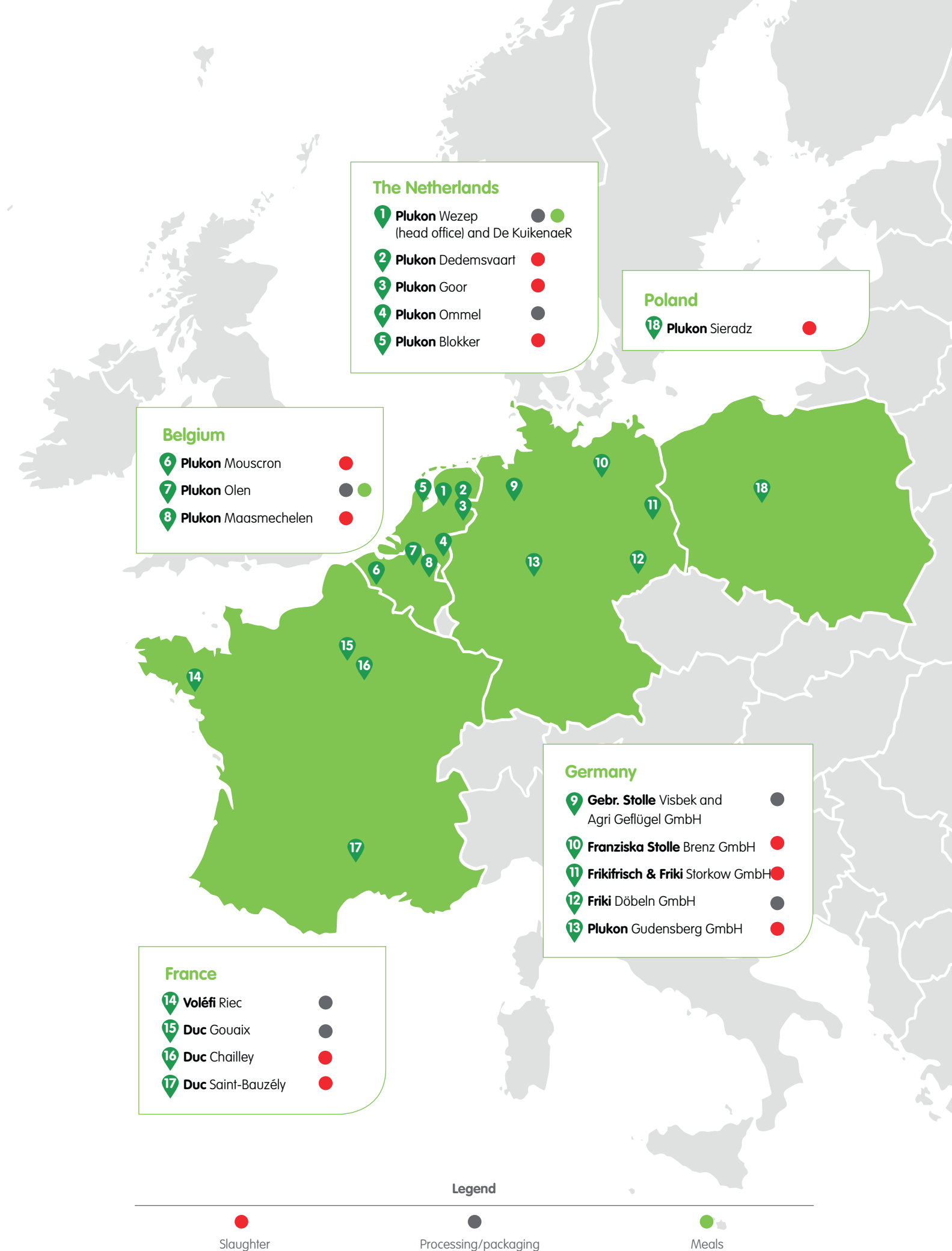
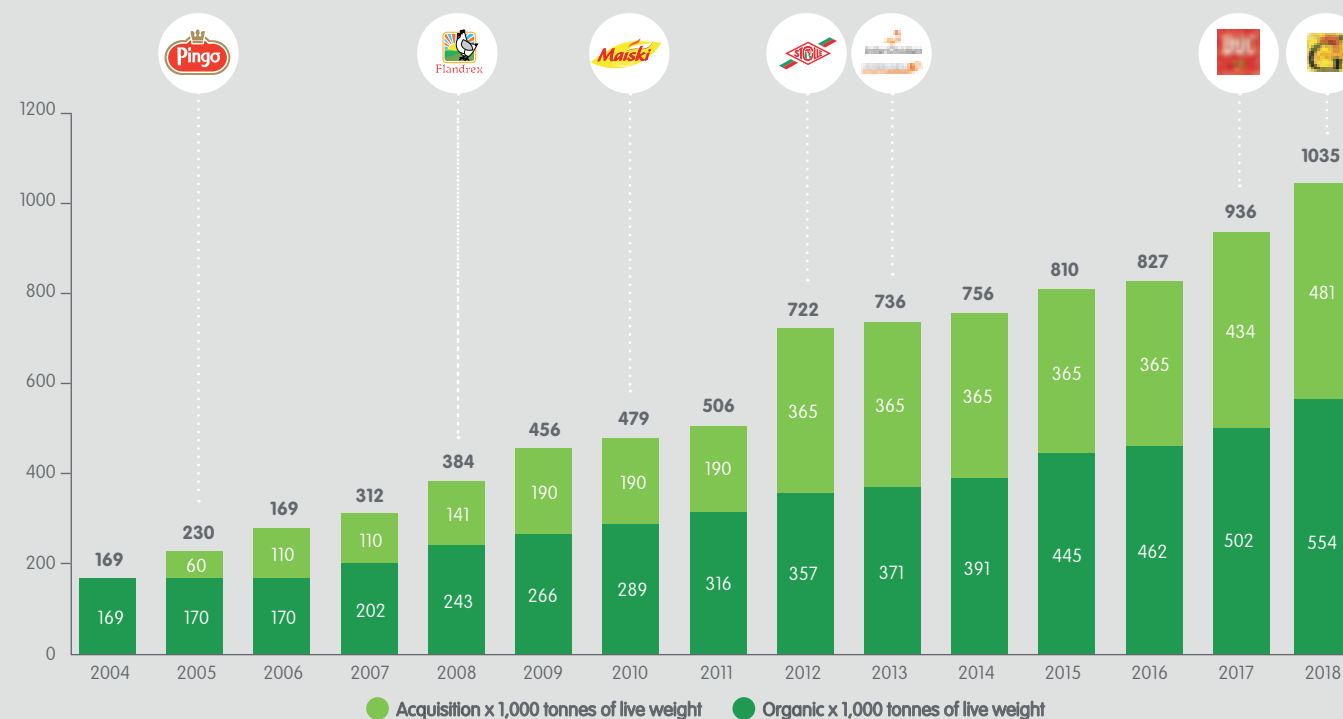
Market leader

Convenience and variety are broader consumer trends that are also visible in poultry consumption. With a full range of poultry products that includes fresh and frozen products, natural and prepared products, grilled poultry products, cold cuts, and ready to cook and ready to eat meals, Plukon is responding effectively to a growing demand in the market for these products. Plukon Food Group is the leading expertise centre for poultry meat and meals, and it is on this basis that we intend to pursue continued growth over the next few years, in terms of quality, capacity and efficiency.

Plukon's position in the European market was strengthened in 2017 following the acquisition of the French poultry meat producer Groupe DUC and the joint venture with Polish-based poultry meat processor Wyrebski. In order to provide the market with the best possible services, Plukon has opted for a clear specialisation for its various sites.

The company aims to expand its market share further through organic growth and high-potential acquisitions, based on the core values of innovation, realism and responsibility, always striking a good balance between the needs of the public, the environment, and profitability.

Volume growth (organic and including acquisitions) 2004-2018



* Excluding feed production and DUC's chicken farm in France.

















Forward Food Solutions

Plukon Food Group aims to be the most knowledge-driven, efficient and innovative producer of poultry meat in Europe. Plukon works with its suppliers and buyers to provide solutions to today's and tomorrow's issues. Plukon is always looking for innovative farming systems and products, based on high quality levels and food safety. The basic objective is developing solutions that meet the needs and requirements of retailers, food-service clients and consumers.

Plukon plays a pioneering role within the supply chain in terms of animal welfare, animal and human health, as well as innovation. This is how Plukon collectively creates value across the entire chain, now and in the future. This is possible only by making smart choices and making optimum use of all resources and raw materials. This way, Plukon aims to increase its positive impact and reduce the negative impact on people, animals and the environment.

This model demonstrates how Plukon created social value in 2018 and contributed to the UN Sustainable Development Goals. These seventeen targets are designed to ensure that a large number of major social problems, including malnourishment and lack of access to clean drinking water, are resolved by 2030. Companies and organisations contribute to achieving these global social challenges.

Main capital	Business model	Output	Impact created*	CSR cornerstones	SDGs
Financial capital <ul style="list-style-type: none">Financial resources (capital, debts and investments) of banks and investors.18 sites across 5 countries.	<div></div> <div>Forward Food Solutions</div> <div>Mission Plukon Food Group aims to be Europe's most knowledge-driven, efficient and innovative poultry producer.</div> <div>Core values<ul style="list-style-type: none">InnovationRealismResponsibility</div> <div>Core activities Producing and marketing high-quality poultry meat products and meal products. Working with partners to develop innovative and realistic solutions in order to improve the sustainability of the poultry meat supply chain and make it future-proof.</div>	Financial capital <ul style="list-style-type: none">€1,727 million in net revenuePlukon supplies its products to the European retail and food-service industries, quick-service restaurants and the food industry.	<ul style="list-style-type: none">Promoting employment, fostering a safe and healthy working environment and contributing to the North West European economy.Improving employee health and safety.Improving the long-term employability of our people.		
Human resources and intellectual capital <ul style="list-style-type: none">6,457 employees.Knowledge and skills of all employees.Training and development.		Human resources and intellectual capital <ul style="list-style-type: none">Wages and pensions.Training and education.Employee health and wellbeing.Sickness absence rate of 5.4%.196 accidents.			
Natural capital <ul style="list-style-type: none">Broilers produced based on various farming solutions (i.e. regular, Good Brood, free-range, organic and FairMastl).Raw materials for responsible poultry feed.Creating value from by-products.Ingredients for meals (including MCS/ASC fish).Other raw materials and packaging materials.Electricity and gas.Water, including approximately 26 million litres of rainwater captured through a Wadi each year.		Natural capital <ul style="list-style-type: none">8.7 million broilers slaughtered and processed a week.1 million ultra-fresh meals and meal components produced a week.	<ul style="list-style-type: none">Contributing to a healthy, varied and safe menu (2.1, 2.2).Promoting more sustainable agriculture (farming, dairy farming and fishery) (12.2 and 2.4).Innovation in sustainability with suppliers (12.2).Improving animal welfare and animal health (12.2).Contributing to safe and efficacious medication for all, through a strong antibiotics policy and measures designed to increase the share of antibiotic-free broilers (3.8).		
		Emissions and waste <ul style="list-style-type: none">Carbon emissions.Wastewater.Filtering wastewater.Creating value from by-products.Industrial and packaging waste.Waste heat.	<ul style="list-style-type: none">Helping to reduce environmental pressure through more efficient processes, logistics and more sustainable packaging (12.5).Contributing to efficient water consumption, filtering and reuse of water and the use of rainwater (6.4).		
			Research and innovation <ul style="list-style-type: none">Developing innovative farming concepts with poultry farmers and customers.Supply-chain solutions to improve animal welfare and animal health.Research into improving animal health.Research in Greenwell consortium into holistic approach for improved sustainability in the poultry meat industry.	<ul style="list-style-type: none">Developing innovative farming systems with a lower impact on animals and the environment contributes to a sustainable food production system (2.4).Innovation for a healthier and more responsible product supply.	
Research and innovation <ul style="list-style-type: none">Cooperation with research and educational institutions, the scientific community and supply-chain partners.	Cooperation and dialogue <ul style="list-style-type: none">Participation in symposiums.Organising industry gatherings/ events.	<ul style="list-style-type: none">Long-term relationships and partnerships aimed at sustainable and healthy innovations, knowledge-sharing and supply-chain transparency.	    		
Cooperation and dialogue <ul style="list-style-type: none">Cooperation and annual meetings with parties including: civil-society organisations, government, and customers and suppliers					

* The numbers listed (e.g. 2.4) show to which SDG indicator Plukon Food Group contributes.

Farming concepts

Developing and maintaining customer-specific concepts with a focus on efficient production, animal health and animal welfare has been a strategic priority for Plukon Food Group for many years.

Innovative concepts

Initiative Tierwohl

In Germany, Plukon works with its partners within the Initiative Tierwohl (ITW), a concept that provides more living space and distraction for the animals. The German ITW increased to more than 1.7 million broilers a week in 2017 and 2018.

Good Brood Chicken

Plukon supplies a significant portion of 'Tomorrow's Chicken' ('Kip van Morgen') products to the Dutch market under the 'Good Brood Chicken' label, a concept developed in 2015 in conjunction with the retail industry.

DUC Certifié

Through this label, DUC meets a demand for slow-growing chickens and turkeys in the French market.

Free-Range Chicken

As one of the largest suppliers of free-range chickens, Plukon teamed up with free-range farmers to invest in the construction of daylight facilities in barns, along with covered chicken runs and materials to enhance the barn. This free-range chicken supply chain has been awarded a star by the Dutch Society for the Protection of Animals (Dierenbescherming).

Organic Chicken

Plukon maintains an organic chicken supply chain in the Belgian Ardennes and France. A large number of farms are collectively involved in creating a supply chain that complies with the strict requirements of organic poultry farming for feed and indoor and outdoor areas, among other things.

FairMast

A concept involving a slower-growing breed which has been awarded one star by the Deutsche Tierschutzbund. Since the end of 2018, these poultry meat products are supplied by German poultry farmers and produced for German supermarkets.

The Group expects these market segments to grow further in 2019 and will continue to play a pioneering role in this process.

2018 +12% versus 2017

2017 +30% versus 2016

Increase in the number of chickens with a greater focus on animal welfare (Good Brood, free range, organic, DUC Certifié, Initiative Tierwohl and FairMast) compared to the previous year.

Products

In 2018, the company slaughtered and processed approximately 8.7 million broilers a week into a diverse range of fresh, frozen and processed poultry meat products. Plukon also supplies various types of turkey meat to the retail market. The company's product range also includes ready meals (both ready to cook and ready to eat), steamed meals, full-meal salads, grilled poultry and meal components such as sauces.

Plukon works together with these external certification partners for the innovative farming concepts.



Brands

Plukon's chicken and turkey products are often sold under retailers' own brand names. In addition, Plukon markets a number of strong international brands:



One of the most widely known brands for food companies and the hospitality industry.



Fresh ready-to-eat meals, sauces and products based on meat and fish.



Fresh and frozen poultry meat for the German retail and food service market.



Animal-friendly chicken products for the German retail market with a Deutsche Tierschutzbund label. The slower-growing breeds have more living space, covered chicken runs and straw bales for distraction.

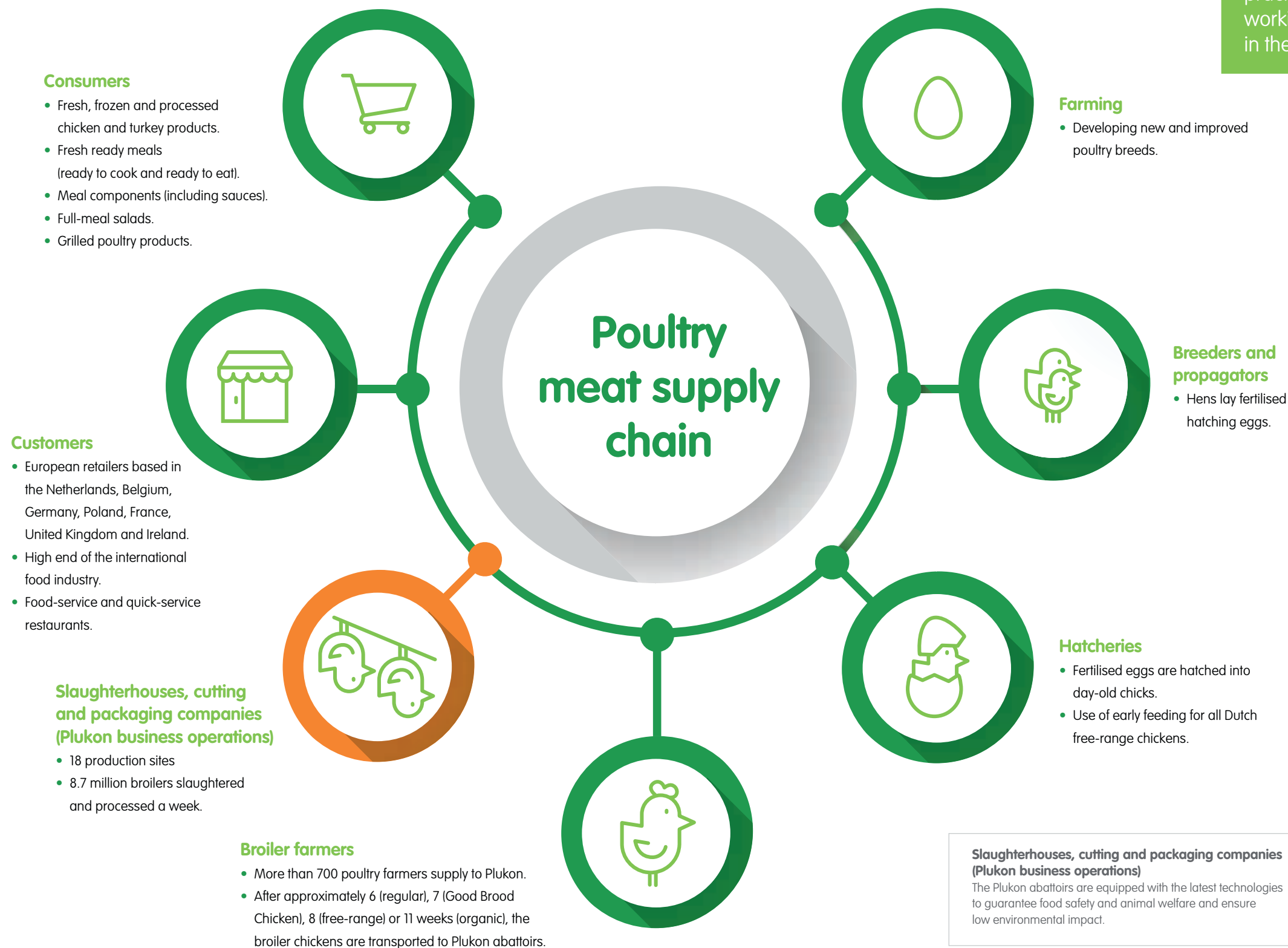


Varied and certified chicken and turkey range for the French retail market.

Supply chain

A chain of companies is involved in poultry production, with each link having its own specialised role and where the partners engage in cooperation and innovation.

Plukon's impact and influence is limited not just to its own organisation. It contributes to improving sustainable practices in the supply chain by working in conjunction with all links in the chain.



Hatcheries

In hatcheries, fertilised eggs are hatched simultaneously in large numbers and with a lot of care. Once the eggs have all hatched, the day-old chicks are taken together to the poultry farm. Eggs that start together in the hatching process do not hatch completely simultaneously in a hatchery. The time period between the first and last egg in the same set at a hatchery can be up to 24 hours. In the early feeding system, the chicks that have just hatched are given direct access to feed and water in a well-lit environment with fresh air and at the correct temperature.

Broiler farmers

To translate purchaser requirements across the chain, Plukon also continuously coordinates with hatcheries and broiler companies. This makes Plukon unique and enables it to promote entrepreneurship in poultry farming. Broiler farmers can decide for themselves which poultry-farming concept they wish to apply. Plukon is committed to working with local poultry farmers as much as possible: not only to keep the transport of live chicks to a minimum, but also in order to be able to offer consumers products from their own country. 'As close to home as possible, and as far away as necessary' is always our objective.

Schedule and supply

De KuikenaeR, which forms part of the Plukon Food Group, plays an important role in the supply chain, organising and scheduling the transportation of broilers to abattoirs across the Netherlands and Belgium. In Germany Agri Geflügel GmbH is responsible for these activities, while in France this part of the business is managed by DUC and in Poland by Agri-Drob Sp. Z o.o. This is how Plukon manages the product quality, availability, concept monitoring, traceability and logistics of the poultry. There is close interaction with farmers, and the collected data is sent back to them for feedback, in order to enable ongoing improvements.

CSR policy

Plukon Food Group's mission is to develop solutions that meet the demands of retailers, the food-service industry and today's and tomorrow's consumers. In doing so it is crucial to strike the right balance between the needs of society, the environment, and profitability.

Looking forward 2025

By responding to external trends and developments relating to sustainability, Plukon is able to make itself more future-proof and enhance its own initiatives. This involves a long-term view of sustainability. Plukon established a target to cover all material topics for 2025 as part of the six cornerstones of sustainability; these are included in the list of 'Priorities and targets' on page 16.

Assurance

The implementation of Plukon's sustainability agenda is integrated into the business operations of the departments involved, including Purchasing, Logistics, Plant Managers, Human Resources, De KuikenaeR, etc. The Plukon Food Group Management Board is responsible for coordinating the development of the sustainability policy, shaped by the company by agreement with internal and external stakeholders. The Board has ultimate responsibility, and twice a year sustainability is one of the items on the agenda of the international management meeting.

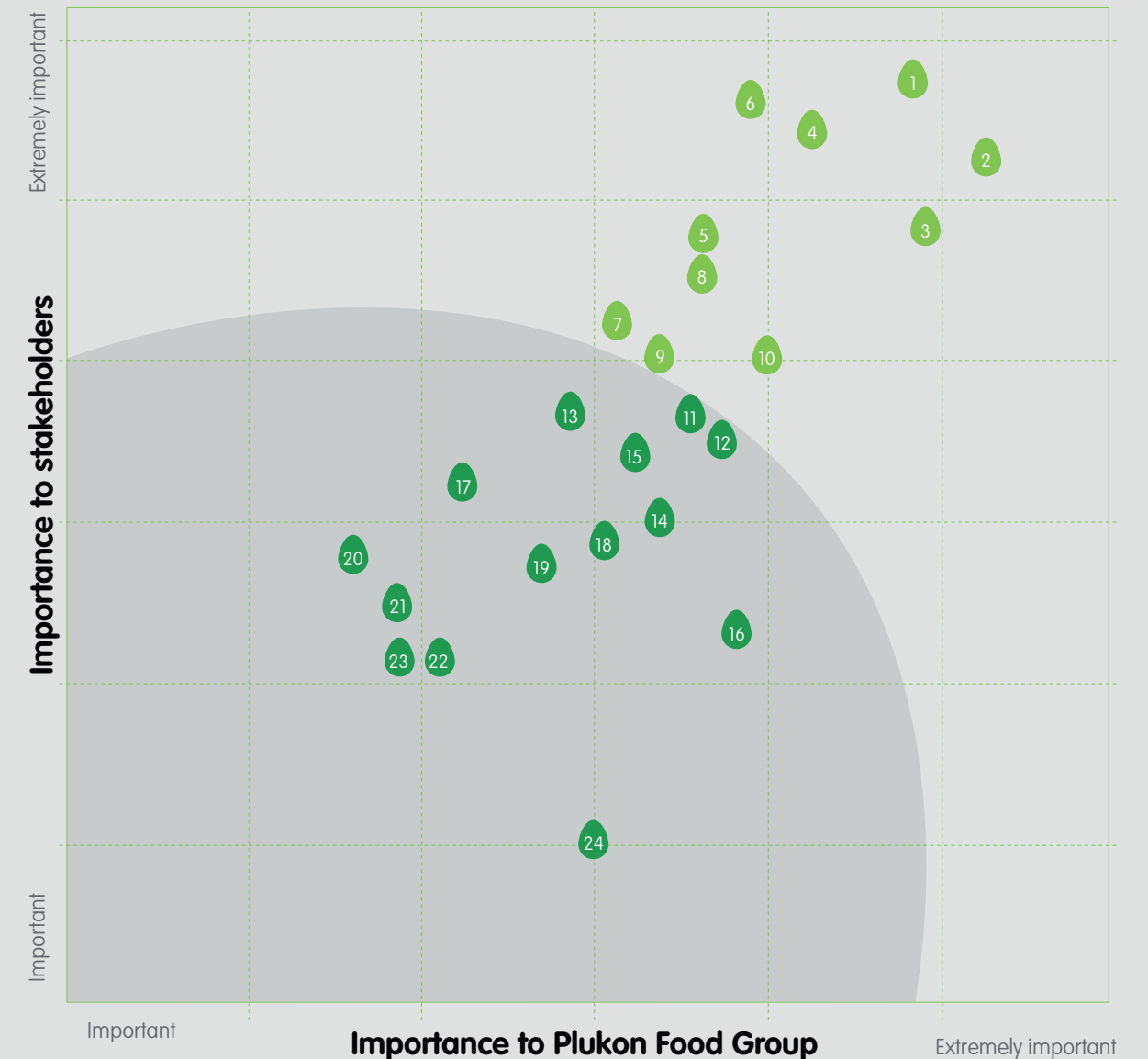
Plukon reports on its progress every two years in its CSR Report. The data for monitoring progress is based on its priorities – for instance data on the use of energy and antibiotics – is collected on a monthly or four-weekly

basis, verified for reliability, and subjected to analysis. The Board is responsible for coordinating both strategic and everyday choices with a good balance between the needs of the public, the environment, and profitability. This is evident, for example, from the investments made in 2017 and 2018 in renewed supply containers which have a positive impact on animal welfare and facilitate more effective logistics. The company made a point of implementing sustainable practices in the reconstruction of its Wezep production site. This resulted in the highest label for sustainable construction: BREEAM-level 5 certification.

The right focus

To ensure that sustainability focuses on subjects that are significant both to Plukon Food Group and to the rest of the world, a materiality analysis has been carried out. You will find further information about the analysis method on page 27 of the [2016 CSR Report](#). The higher the topic appears in the figure, the more important stakeholders consider this to be for Plukon. The further to the right a topic appears in the figure, the more important this topic is for Plukon and the more influence the company can exercise on this topic. The ten most relevant topics are at the heart of the sustainability policy and of this CSR report.

Materiality Matrix



Material topics

About Plukon Food Group

- 1 Financial performance

Food safety and transparency

- 2 Customer satisfaction
- 3 Food safety

Animal welfare

- 4 Animal welfare
- 5 Developing innovative farming concepts

Animal health

- 6 Animal health

Circular and efficient business operations

- 7 Energy-efficiency

Human resources and society


- 8 Social compliance
- 9 Development opportunities for employees
- 10 Safe working conditions

Other relevant topics

- 11 Employee satisfaction
- 12 Stakeholder engagement with Plukon
- 13 Plukon's social engagement
- 14 Logistics optimisation
- 15 Transparency
- 16 Sickness absence
- 17 Using responsibly-produced raw materials
- 18 Employee diversity and employee participation
- 19 Reducing water consumption
- 20 Use of green energy
- 21 Closing the mineral material cycle
- 22 Reducing waste
- 23 More sustainable packaging materials
- 24 Healthy product range

Priorities and goals


Plukon established a long-term target for 2025 as part of the six cornerstones of sustainability. Based on these performance indicators the results obtained are identified. This is all part of Plukon’s quest for continuous improvement.



Healthy and responsibly-produced products

The challenge: The market demands fresh, healthy and easy-to-prepare food. The environmental impact of our food plays an increasingly important role in consumer choices.


Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Use of responsible raw materials Increasing the share of sustainably produced raw materials in conjunction with customers, including fish in meal and salad products and encouraging the purchase of responsible ingredients for poultry feed.	10% growth in the volume of certified soy (RTRS or ProTerra) in 2025 versus 2018 (2% annual growth).	33.4% growth versus 2017	22.3% growth versus 2016	<div> <div></div> <div></div> <div></div> </div>
Healthy product range Reducing sugar, salt and fat content in processed chicken products and meal and salad products in conjunction with customers.	100% of meal concepts will have a Nutri-score of A or B by 2025.	100%		<div> <div></div> <div></div> <div></div> </div>



Food safety and transparency

The challenge: Retail customers must be able to trust that Plukon’s products are fresh, safe and of an exceptional quality. Consumers are increasingly demanding clear and transparent information about products and their origins.


Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Food safety Improving food safety by reducing campylobacter and salmonella in the poultry supply chain. Participating with supply-chain partners and other partners in scientific and industrial research to boost food safety in chicken products and meals.	All sites are certified in accordance with internationally recognised food safety requirements (IFS/BRC).	100%	100%	<div> <div></div> <div></div> <div></div> </div>
Customer satisfaction Reducing sugar, salt and fat content in processed chicken products and meal and salad products in conjunction with customers.	Conducting biannual stakeholder and customer analyses in 2019, 2021, 2023 and 2025.	Annual performance reviews with retail customers.	Annual performance reviews with retail customers.	<div> <div></div> <div></div> <div></div> </div>



Animal welfare

The challenge: The welfare of broilers in the barn, as well as during transport and slaughter, is a key priority for many stakeholders, and Plukon will continue to innovate in this area together with poultry farmers.

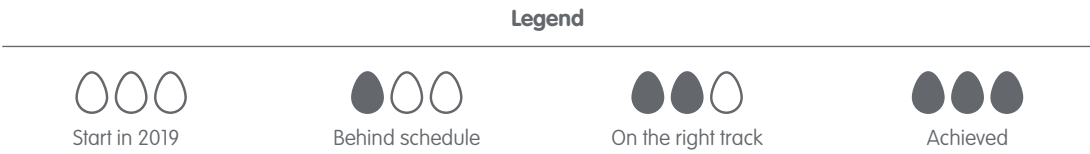
Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Development of innovative farming concepts Working with broiler farmers and stakeholders to develop innovative, animal-friendly farming concepts. Encouraging broiler farmers to take part in market initiatives for improved animal welfare.	2.5% annual increase in the number of chickens kept as part of a concept based on improved animal welfare.	12%	30%	<div> <div></div> <div></div> <div></div> </div>
Animal welfare Participating together with partners (including supply-chain partners) in scientific and industry research into animal-friendly slaughter and improving animal welfare in barns and in transit.	Innovative container system (ATLAS) for improved and more efficient supply to slaughterhouses to be implemented at 7 sites.	2 sites	1 site	<div> <div></div> <div></div> <div></div> </div>



Animal health

The challenge: Improvements in animal health result in reduced use of antibiotics and improved animal welfare.

Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Animal health Actively encouraging all broiler farmers supplying to Plukon Food Group to further reduce the use of antibiotics, and directing this process.	Minimum of 50% antibiotic-free broilers within each concept (regular concept and concepts based on improved animal welfare) across all countries where Plukon operates.	Good Brood Chicken: 88% Free Range: 96% Organic: 94% Regular: 44%	Good Brood Chicken: 87% Free Range: 96% Organic: 96% Regular: 33%	<div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> <div></div> </div>
Animal Health Encouraging broiler farmers and hatcheries to apply early feeding.	Encouraging early feeding across all countries where Plukon operates.	24% growth in the number of broilers receiving early feed-ing versus 2017	16% growth in the number of broilers receiving early feed-ing versus 2016	<div> <div></div> <div></div> <div></div> </div>





Circular and efficient production

The challenge: Production has an impact on the environment due to energy and water consumption and packaging. It also contributes to emissions of greenhouse gas and particulate matter. Getting the most value from waste flows from the poultry meat supply chain to contribute to a circular economy.

Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Circular solutions Getting maximum value from byproducts within the poultry supply chain and reducing the environmental impact of packaging.	20% reduction in plastic packaging materials per kilogram of products sold in the Netherlands by 2025.	-	-	○○○
	25% of the packaging materials used in the Netherlands will be renewable or recyclable by 2025.	-	-	○○○
	100% of packaging used in the Netherlands will be fully recyclable by 2025.	-	-	○○○
Saving energy through energy-efficient production Improving energy-efficiency of Plukon Food Group's production sites.	Produce 2.5% more energy-efficiently in 2025 versus 2015.	1.4% lower electricity consumption and 4.3% lower gas consumption per tonne of live weight versus 2015.	4.5% lower power consumption and 8.7% lower gas consumption per tonne of live weight versus 2015.	●○○



Plukon Food Group's business operations

As a leader in the Northwestern European poultry industry, we will continue to respond to dynamic trends and developments and ensure the continuity of the company and its supply-chain partners.

Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Financial performance It is only by maintaining financially solid business operations that Plukon can continue to deliver value to customers, shareholders and employees and continue to contribute to all priorities defined.	Plukon aims to significantly increase its revenue by optimising production capacity in Poland and achieving further growth in the French market.	€1,727 million in net revenue	€1,692 million in net revenue	●●○



Human resources and society

The challenge: Attracting and retaining talented and motivated employees is essential to a growing organisation such as Plukon. Safe working conditions and healthy employees result in lower sickness absence rates and lower staff turnover.

Priorities	Target 2025	Results for 2018	Results for 2017	Progress
Employee development opportunities Promoting the health and long-term employability of staff through workplace education and pilot projects related to long-term employability.	Train an average of 10 trainees a year as part of the international Plukon traineeship in the Netherlands, Belgium and Germany in order to increase the number of new hires and improve promotion within the company.	5 trainees in 2018	Development of the trainee ship	●●○
Safe working conditions Safe and healthy working conditions for all Plukon employees is an important criterion in the production of poultry meat and meal products. Safeguarding workplace health and safety is therefore a priority. Accidents and sickness absence are registered so that changes can be made where necessary in the workplace or in processes.	30% reduction of the number of accidents resulting in absence at all sites by 2025 versus 2018.	6.4% reduction in the number of lost-time injuries per 1,000 employees versus 2017.	2.2% increase in the number of lost-time injuries per 1,000 employees versus 2016.	●○○
	Less than 6% average sickness absence rate across all sites by 2025.	5.5%	6.1%	●●○
Social compliance Plukon conducts a survey among its employees every two years designed to identify workplace health risks and prevent and reduce these risks as much as possible.	>65% of employees in the Netherlands will participate in the Preventive Medical Examinations.	No Preventive Medical Examinations conducted	60% participation in Preventive Medical Examinations in 2016	●●○

Legend



Start in 2019



Behind schedule



On the right track



Achieved

Dialogue with stakeholders

Plukon Food Group aims to offer clients and other stakeholders transparency concerning its sustainability policy and operations. It is only by cooperating with other players in the production supply chain that the poultry industry can further improve its sustainability. This extends beyond the impact of our own company. Plukon engages in dialogue with stakeholders who are interested in or relevant to its strategy and with those who can have an impact on its success.

Employees

Plukon Food Group needs employees to be able to do their jobs in health and safety both now and in the future.

Topics discussed in 2017 and 2018

Employees exchanged ideas with the company through works councils and employee participation councils. This occurred at a number of different levels: European-wide, at the national level and at each Plukon site. Employees participated in working groups that consider specific subjects, which may include anything from safety to sickness absence.

Follow-up steps for 2019 and beyond

A Preventive Medical Examination will be conducted in 2019.

Customers

Satisfied customers are of the highest importance, as we need our customers in order to continue meeting consumer demands.

Follow-up steps for 2019 and beyond

Partnership with EFMI Business School.
Participation in Initiative Tierwohl meetings.

Topics discussed in 2017 and 2018

Plukon interacts with customers every day. In addition to making various practical arrangements and fielding questions, the company and its customers discussed topics such as animal welfare and environmental impact. Plukon discusses the sustainability goals of its customers and explores ways to achieve these together. A key issue in the discussions held with quick-service restaurants and the food service industry was the reduction of antibiotics.

Industry

Plukon is a member of various European and national sectoral organisations to ensure that it remains informed about the latest developments in the sector and in new legislation and regulations.

Topics discussed in 2017 and 2018

Subjects such as improving working conditions and reducing animal disease are at the top of the agenda for the meetings conducted with industry associations. Since 2016, the Dutch poultry meat industry has been providing stakeholders with information on progress in areas such as antibiotics reduction, reduction in particulate matter and early feeding through the website www.kipinnederland.nl.

Follow-up steps for 2019 and beyond

Active participation by Plukon in industry associations in the development of policy rules for animal health care and working conditions.

Civil-society organisations and knowledge institutes

Through cooperation, knowledge development and knowledge exchange with these organisations, Plukon can further refine its sustainability policy and can continue to innovate.

Follow-up steps for 2019 and beyond

Plukon and the University of Ghent will be launching their study in 2019.

Topics discussed in 2017 and 2018

Plukon worked closely with a diverse group of civil-society organisations, including CIWF. Topics of conversation included the European Broiler Ask, Marek's disease and animal welfare during capture and loading. Plukon actively participated in meetings and debates on animal welfare and animal health. The company has been working in conjunction with various research institutions and universities on research projects in areas such as Marek's disease (in association with the Municipal Health Service) and measuring animal health indicators (in association with the University of Ghent).

Public-private partnerships

Topics discussed in 2017 and 2018

Plukon is a member of the Greenwell consortium with various other partners, including Wageningen University & Research (WUR). This project is concerned with how the supply chain can become more sustainable using 15 criteria ranging from the environment and animal welfare to economic feasibility.

Follow-up steps for 2019 and beyond

Plukon will remain closely involved in this study in 2019.

Suppliers

Enterprising broiler farmers are indispensable to the development of farming systems. Plukon has been working with raw materials suppliers to reduce environmental impact.

Topics discussed in 2017 and 2018

Plukon worked closely with more than 700 broiler farmers who supply to the company. Trends and developments were discussed in a series of meetings for broiler farmers in 2017 and 2018. Plukon also hosted a meeting for poultry companies engaged in the capture of animals in order to open up discussion to the subject of animal welfare during animal capture and loading. Plukon publishes a quarterly magazine called Plukonnect for poultry farmers and collaborating partners in the poultry supply chain, in order to inform them about trends and developments at Plukon and to keep them connected to Plukon. Plukon began publishing Plukonnect in 2015.

Follow-up steps for 2019 and beyond

Plukon will continue to host meetings about the latest topics with poultry farmers in 2019.

Dialogue with stakeholders

Consumers

Plukon is transparent in order to accommodate growing demand from consumers for information on the origin of food.

Topics discussed in 2017 and 2018

Plukon attends the annual Landbouwdagen Intensieve Veehouderij (LIV) in Hardenberg, the Netherlands, an event that was renamed Dutch Poultry Expo in 2019. Plukon and Stichting 'Kip.Kiplekker' hosted this event together in the Netherlands in 2017. This included a campaign created by young people working within the industry under the name 'Young Poultry People'. Consumers were given a look behind the scenes through social media messages, field trips and open days.

Follow-up steps for 2019 and beyond

Active participation on the board of the foundation and actively sharing messages with consumers.

Plukon supports

The company satisfies all international quality standards such as IKB Kip (the Netherlands), Belplume (Belgium) and QS (Germany). Certifications: RTRS, RSPO, ASC, MSC, ProTerra Foundation, BSCI Code of Conduct, which is based on international guidelines such as the OECD Guidelines, the UN Guiding Principles on Human Rights and the International Labour Organization.

Plukon is a member of

The association of Dutch Poultry Processing Industry (NEPLUVI).

'Public value is a licence to produce'

'Worldwide demand for poultry meat is growing exponentially and is only set to increase further in the coming years, while at the same time public interest in the subject of poultry will continue to grow. Aspects such as animal welfare, environmental footprint, or the use of animal medication all play a crucial role. This applies not only to the Netherlands and surrounding countries, but also to countries such as Ukraine, China and other Asian countries. This is due in part to the fact that these are requirements for being able to supply to the EU, as well as because in a growing number of international markets, consumers, retailers and manufacturers recognise the importance of sustainably produced poultry meat to public health and for achieving key climate targets.

Plukon has a leading role in the European poultry industry, being ahead when it comes to creating solutions to everyday challenges and their roll-out among poultry farmers and other supply-chain partners. Our company is particularly active in the development of slow-growing chicken breeds, with clear advantages in animal welfare and a reduced need for antibiotics. In addition, Plukon is active in the development of barn systems which reduce emissions of greenhouse gases and particulate matter. In doing so, Plukon works in association with supply-chain partners, including suppliers and buyers. The development of meat substitutes is consistent with this policy. Instead of clinging to animal protein, following the trend of hybrid and vegetable sources of protein.

I recognise the dilemma of rapid market growth standing in the way of sustainability in the longer term in order to ensure short-term profits. Achieving short-term results by increasing bulk production is not a sustainable policy in terms of cost price. Public

values such as animal welfare and reduction of antibiotics use and emissions are strong arguments that justify a higher price. For Plukon, these values are a 'licence to produce', which comes with a set of arrangements in the supply chain that will be able to gradually improve sustainability performance. This is one way to avoid slowing down sustainability efforts because of the development of a sub-segment between bulk and organic food.

The Climate Agreement sets a target of net 0% greenhouse gas emissions by the year 2050. Another target for the poultry industry is zero use of antibiotics by 2050. This requires cooperation and the use of new technologies. In order to make sure that poultry meat has been produced in accordance with animal welfare standards and on a climate-neutral and energy-neutral basis, you need to know its origin. This requires the advanced use of digital technologies. I estimate that we are currently at between 10 and 15% of what is required, so I expect to see a further increase in the use of digital technologies over the next few years. In addition, this also facilitates individual chicken management, instead of in pairs, as is the current practice. Improving precision farming, including the various options available for improving animal welfare and reducing our environmental footprint. The increased use of digital technologies also creates more and better information in the supply chain, which is easy for the various links to respond to. This is the future, which helps Plukon to deliver on its message of corporate social responsibility.'

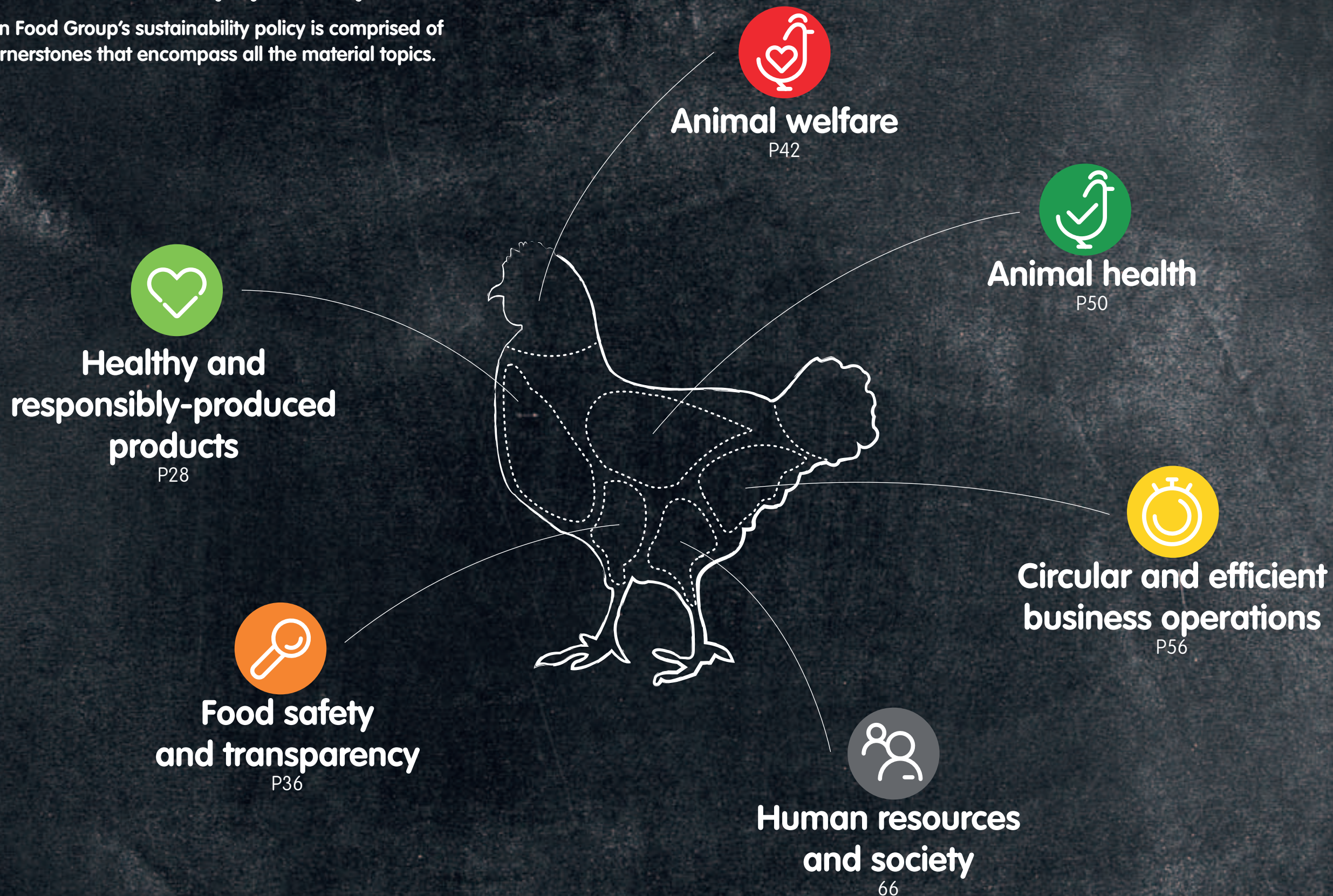
Ruud Huirne

Special Advisor Food & Agri Transition at Rabobank



Six cornerstones of our sustainability policy

Plukon Food Group's sustainability policy is comprised of six cornerstones that encompass all the material topics.





Healthy and responsibly-produced products



The challenge

A growing number of consumers are looking for fresh, healthy and easy to prepare food, and demand for poultry meat is expected to continue to increase in Northwestern Europe over the next few years. The origin and impact of the food we consume on the environment and climate play an increasingly important role in the food choices made by consumers.



Our solution

Unprocessed poultry meat is low in fat and rich in protein, vitamin B6 and the minerals phosphorus and selenium. Chicken and poultry are part of a healthy diet. In 2017 and 2018, Plukon launched dozens of new products in the fresh and ready-to-eat category, and lowered the sugar content of all its products. In addition, Plukon has been working on further reducing the (already relatively low) climate footprint of chicken meat by purchasing sustainable raw materials, as well as through improved feed conversion, energy-efficiency in the barns and more efficient business operations.

Looking forward

Using responsibly-produced raw materials

- Working with our chain partners toward 10% growth in the volume of certified soy (RTRS or ProTerra) in 2025 versus 2018.

Healthy and sustainable product innovations

- 100% of our meal concepts will have a Nutri-score of A or B by 2025.
- International launch of vegetarian cheese products in 2019.

Using responsibly-produced raw materials

Responsibly-produced poultry feed

High-quality, safe feed that perfectly meets the nutritional needs of poultry at each stage of life contributes to the health of the animals. Broilers are given a mix of maize, soy, wheat, various vitamins, oils, fats and other ingredients. Soy is one of the richest sources of protein in animal feed and is easily digested by poultry. The feed for broilers comprises an average 20 to 25% soy pellets and other food industry waste streams.

Plukon works with supply-chain partners on adopting more sustainable standards for poultry feed.

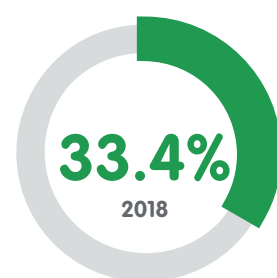
For example: by increasing the share of certified soy (through RTRS and the ProTerra Foundation). Soy is grown primarily in South America. Soy farming in this region is exposed to certain environmental and social risks, including deforestation, soil depletion and water contamination through the use of fertilisers and pesticides. Soy that is purchased through The Round Table on Responsible Soy (RTRS) satisfies criteria regarding nature conservation, biodiversity, good agricultural practices, good employment conditions and respect for local land rights.

Locally produced raw materials

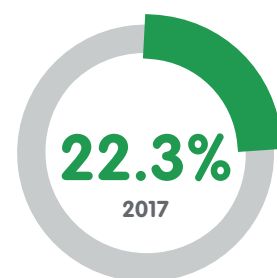
Plukon has been working with feed suppliers and educational institutions on investigating the various applications of European-grown raw materials.

Soy

Soy intended for free-range chicken and Good Brood Chicken feed for retail satisfies at least RTRS or ProTerra Foundation requirements.



Increase in the amount of certified soy versus 2017



Increase in the amount of certified soy versus 2016

This includes, for example, locally grown soy or protein substitutes which can fully or partially replace soy. Organically grown soy has become more common in Europe, particularly in Italy. This has been used as an ingredient in organic poultry feed since 2018.

Ingredients for meals

In all ready meal concepts, Plukon uses ASC or MSC certified fish. This fish is farmed or caught sustainably, with a focus on preserving the natural living environment of fish. In all chicken-based salads for the Dutch market, Plukon uses Good Brood Chicken or Free-Range Chicken.

Healthy product range

Chicken: a healthy and responsible choice

Chicken and poultry fit perfectly in a healthy diet, particularly because of its protein, vitamin and mineral content. The World Health Organization (WHO) recommends poultry in its '5 keys to a healthy diet'. By following these guidelines, people consume the nutrients they need, preventing illnesses such as diabetes and cardiovascular diseases. In Northwestern Europe, healthy food is a permanent trend that has driven consumption of chicken and poultry.

Plukon is committed to reducing the sugar and salt content of its chicken and grilled poultry products. The sugar and salt content of our chicken drum sticks were reduced by 33% and 25%, respectively, in 2017 and 2018.

Plukon also aims to reduce allergens in products and is developing innovative products for consumers who have specific food intolerances. We also reduced the amount of allergens in our existing product range, including gluten.

Healthy meal concepts

The product range offered by Plukon Food Group has been extended with dozens of new meal concepts since 2016. By engaging in ongoing innovation, Plukon accommodates consumers' demand for healthy and fresh food that is more convenient at the same time.

This ranges from ready to cook and ready to eat chicken products to chilled ready meals and salads. Plukon is always on the lookout for new recipes and ingredients, in order to offer consumers as much variety as possible. The main criteria in this case are: freshly prepared, high vegetable content and lower salt, sugar and fat content. Steamed meals, for example, contain a minimum of 150 grams of vegetables. Plukon aims to further reduce sugar, salt and fat content in a number of products, while preserving flavour and quality. This was achieved in 2018 for the dressings for four full-meal salads and the vegetable & tabouleh salad. These contain an average of 24% less sugar. Our vegetable & couscous meal has also been improved, resulting in a sugar reduction of 33%. Our packaging in the French and Belgian market contains a Nutri-score, which helps consumers choose healthy options.

In order to help consumers in eating their recommended daily allowance of vegetables, the vegetable content of products is clearly stated on the front of the product packaging in the Netherlands. In addition to the total number of grams of (added) sugar and salt, the label states the amount of the daily recommended allowance of sugar, salt and fat contained in the product.

Nutri-score

This is a colour scale combined with letter codes which indicates which products within a specific product group are healthier than others. The label used for healthy nutrition ranges from A (green) through E (red). Products which have been assigned a score of A have few negative properties (e.g. sugar, saturated fats, calories and salt) and a large number of favourable properties (e.g. fruit, vegetables, fibre, protein, etc.).



'Packaging choices must be based on an overall picture'

'As a microbiologist specialising in conservation technology, I analyse processes to extend the shelf life of food. Packaging technology is relevant to this, alongside products and processes. All manufacturers receive questions about the use of packaging materials, particularly plastic. Mono-materials are easier to recycle, but chicken requires a gas mixture that must remain inside the packaging. A large number of studies have been conducted into mono-materials made of polymers which are able to do this. Another trend in the food industry is convenience. For processed products containing meat, vegetables and pasta or rice it is difficult to find the appropriate gas mixture. Since vegetables must be able to continue breathing, you need to make compromises, which affects shelf life.'

The four main trends through which Plukon must manoeuvre include recyclability and circularity; ease of use/user-friendliness; product safety and an acceptable shelf life. I am aware that Plukon is very diligent in everything it does and that they're meticulous about their testing. This is very

important, as food companies tend to choose to look at the short term and focus on a single aspect. Packaging choices must also be based on an overall picture. Packaging materials have an environmental footprint, but they also help fight food waste. This is a dilemma you need to keep in mind. Packaging policy must concern the full role of packaging and product and must assess various dilemmas. You can then find arguments for your choices through these measurable criteria and subsequently communicating this. Plukon's packaging targets for 2025 are feasible, but there are only several years left. The technology is still under development, but the social issues and requirements are increasingly upgraded. In addition, you need to keep monitoring changes in cost price. This makes it a particularly challenging process for Plukon. That's why it's good that the company is opting for an in-depth approach.'

Professor Frank DeVlieghe
University of Ghent



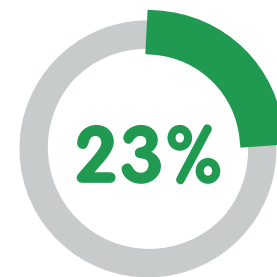
Healthy product innovations in 2017 and 2018

- Meals and salads launched in 2016 with a low carbohydrate content where regular rice has been replaced with cauliflower rice, for example.
- All steamed meals except one produced for the French and Belgian markets received a Nutri-score of A in 2018. Our vegetarian meal earned a Nutri-score of B, meaning it is low in salt, sugar and/or fat.
- 'Cooking for 2' concept launched in 2018. A complete meal whose ingredients have been bundled into several different compartments. This includes fresh pasta, where the chicken has been pre-marinated and the vegetables are pre-sliced.
- Meals for single-person households launched in 2018, with a combination between a hot and a cold section. Including Pasta Carbonara, where the salad is packaged separately from the pasta.
- The 2018 range includes a total of 66 ready meals, including steamed meals, full-meal and lunch salads and vegetable formulas (for example tabouleh and couscous). Launch of various fresh chicken burgers in 2017.
- Extension of the free-range concept.
- Extension of the range of cooked products, including roasted chicken thigh flakes, which can be used for a variety of purposes, including as a flavour enhancer for salads.

Vegetarian variety

A growing number of consumers are choosing to occasionally eat vegetarian or vegan meals. One of the sites of DUC in France produces meat substitutes. Over the past year, we continued to focus on building a wider range of vegetarian alternatives, including casein-based meat substitutes.

Vegetarian product innovations



of the range of ready meals was vegetarian in 2018

- 'Chili-san-carne' steamed meal launched in 2017 with sweet potatoes, bean mix and cream cheese.
- Cheese schnitzels and meat substitutes launched in 2018.
- Increased vegetable protein content in meals by using beetroot burgers and risotto balls in 2018.
- Vegetarian Christmas specials launched in 2018, including a roulade and a nut roast.
- Fish-free 'Tuna Salad' launched in 2018 in conjunction with De Vegetarische Slager.



'Better products for well-informed consumers'

'Ever since DUC was incorporated into Plukon Food Group (in 2017), the partnership has turned out to be very advantageous for both parties. We have similar views of the European consumer market and which types of foods appeal most to health-conscious consumers who also demand sustainably-produced foods. Plukon's knowhow and infrastructure – especially its accredited lab – enables DUC to develop these types of products. DUC and Plukon complement each other well, as we both serve the same buyers. We support Plukon in their further expansion in the French market, and through Plukon's R&D we can develop products for health-conscious and well-informed consumers. A good example is a vegetarian steak which we developed exclusively for a major Dutch grocery retail chain.

We manage our production supply chain up to and including the hatcheries and feed suppliers, which we also map out in great detail. We also use these insights to monitor the use of antibiotics. We generally focus on ongoing improvement and hygiene inspection conducted throughout the

production chain. Where necessary we upgrade our processes in conjunction with Plukon.

This enables us to conduct further product development. We focus on reducing the use of additives and preservatives and promote the development of more vegetarian products. Plukon is well familiar with the market and shares its expertise. As a member of the Plukon family, we are confidently working on continuously improving the safety and quality of our products.'

Juliette Zamparini

Quality Manager at DUC, France





Food safety and transparency

The challenge

Retail customers, industrial buyers and consumers must be able to rely on Plukon's products being fresh, safe and of an exceptional quality. Consumers are also increasingly demanding clear and transparent information about the product and its origin.

Our solution

All Plukon chicken and meal-related products satisfy the highest quality and food safety standards. Through its own lab and a supply-chain quality assurance system for all links in the chain, Plukon checks product quality and for the presence of campylobacter, salmonella and listeria in the products. Plukon sets high standards for all its suppliers and works closely with them in scientific and industry research into food safety. Plukon works with supply-chain partners to improve supply-chain transparency and access to the origin of products.

Looking forward

Food safety and transparency

- All sites are certified in accordance with internationally recognised food safety requirements (IFS/BRC). During acquisition processes, sites are checked for compliance with national and international laws and regulations and brought in line with the certification applied by Plukon.

Customer satisfaction

- Since Plukon greatly values feedback from the market, it is once again conducting a biannual stakeholder and customer analysis in 2019.

Food safety and transparency

Research by in-house laboratory

The accredited Plukon Food Group Laboratory conducts microbiological, chemical and storage life research for Plukon Food Group companies, hatcheries and poultry farmers in the Netherlands, Belgium, Germany, France and Poland.

Standards are rising all the time due to the growing range of fresh ready meals and cooked chicken products available. In order to guarantee that food is safe, good hygiene and stringent checks for ready to eat products are more important now than ever before.

The laboratory plays an important role in preventing, tracing and eradicating key pathogens such as campylobacter, salmonella and listeria. In 2018, the Plukon laboratory conducted over 295,000 analyses of samples from all links of the poultry supply chain. This includes, for example, insert sheets, overshoes and manure, as well as chicken parts and end products. The uniform measurement methods and an

automated reporting system ensure that the analysis results become available quickly and product locations can compare themselves with each other easily. This ensures direct lines of communication, making it easy to take measures if test results are positive.

Optimum shelf life

Plukon never stops innovating, with new, fresh and cooked chicken products, meal concepts, recipes and packaging. This requires a great deal of work in terms of technology and microbiology. The lab checks the shelf life of Plukon products and researches the optimum combination of ingredients, gas composition and packaging material for storage life and retention of flavour. The results of these tests do not only contribute to food safety, but indirectly to the reduction of food waste as well.

Standards and regulations

Plukon's products meet strict food safety requirements and national and European legislation. Using recognised quality standards, including the HACCP approach, Plukon ensures that these rules are embedded at all levels of the organisation and the supply chain.

Quality standards

- National quality standards, including rules for the supply chain as a whole (from hatchery to slaughterhouse and cutlery): IKB chicken in the Netherlands, Belplume in Belgium, and QS in Germany.
- Global Food Safety Initiative (GFSI): food and safety standard for all Plukon production sites. GFSI is an international retail sector initiative for global collaboration to advance food safety.
- HACCP quality assurance system: system designed to identify critical (or essential) points which affect the safety of the end product (i.e. chicken products and meals).
- Plukon applies the IFS and BRC certification based on the HACCP method and guarantees its customers that it uses an internal quality assurance system combined with the requirements for the surroundings, product, process and staff.
- International Food Standard (IFS): implemented in the Netherlands, Belgium, Germany, France and Poland.
- British Retail Consortium (BRC): implemented in the Netherlands, Belgium, France and Poland.

The packaging of all products shows the required product information. Including nutrition value, allergen information, sell-by date and the origin of the chicken.

Traceable and transparent

Traceability and insight into the supply chain

Plukon is very familiar with the poultry supply chain thanks to its direct relations and the quality assurance system for all links in the supply chain. Plukon works with De KuikenaeR and Agri Geflügel to make arrangements for product quality, availability, traceability, and logistics of the poultry. This ensures adequate quality assurance and monitoring for pathogens such as salmonella. Plukon conducts audits to monitor the performance of poultry farmers based on criteria such as animal welfare and animal health. Plukon knows its feed suppliers and their suppliers, as a result of which the raw materials used in the production of the feed can sometimes even be directly traceable to the farmland. This applies, for example, to non-GMO soy with the ProTerra certificate.

For the ingredients of prepared chicken products, grilled poultry products, fresh ready meals (ready to cook and ready to eat), full-meal salads and meal components such as sauces, Plukon maintains several supply chains. Plukon interacts directly with growers for the fresh ingredients. Here, too, Plukon carries out its own food safety tests and exchanges knowledge with farmers. All suppliers are subject to the Supplier Code and are required to comply with the BSCI Code of Conduct, which sets out standards of compliance with Dutch and international laws and regulations regarding employment, discrimination, the environment, safety and health.

Satisfied customers

Our account managers liaise closely with our customers, including annual proactive meetings. This is how Plukon promotes market trends and is able to provide innovative solutions or initiate new partnerships. Despite the stringent quality assurance process, however, something may occasionally go wrong, for example through delivery or information printed on product labels. Customers can indicate this by means of a complaint handling system. A careful procedure ensures that all complaints are processed correctly and its further settlement so as to ensure that the process improves.

'Transparency creates trust'

'Consumers want to know where their food is sourced from, how it is produced and whether it is safe. Due to several recent incidents involving the reliability of food, we are well aware how quickly these types of crises can go 'viral' on social media. Since this constitutes a risk factor, Plukon wants to closely monitor its supply chain in order to ensure that they deliver on their promises. This serves as the basis for the trust consumers have in the brand.'

We check the end product manufactured by Plukon, of which we can verify the DNA combined with a reference database containing chicken DNA data. A significant portion of the work we perform for Plukon involves ensuring that the products do indeed originate from poultry that has been subject to improved animal welfare standards. Only specific, slow-growing breeds of chickens are permitted. We closely trace the genetic structures of the type of slow-growing animals permitted for a specific animal welfare label.

We came into contact with Plukon through our work for a Dutch grocery retail chain which hired our services to verify the product integrity of poultry products. Plukon offered to cooperate in every way possible, because they understand how important

trust and transparency are to brands and product categories. Plukon saw the way we worked, and based on our strong partnership we began working for them as well in 2018. We check the origin of animals from different farming systems right up to the farm.

Transparency creates trust. A company like Plukon, which takes food safety and animal welfare seriously and which is serious about reducing the use of antibiotics, faces additional expenses. Complete transparency is essential in order to ensure equal opportunities in the market, because illegally mixing product streams somewhere in the supply chain can undermine the business models of sustainable and responsible producers.'

Ronan Loftus

CEO, IdentiGEN





Animal welfare

The challenge

Further improving the wellbeing of broilers through innovation and cooperation within the industry.

Our solution

Plukon Food Group, being a leader in its industry, has pioneered a number of innovative farming concepts in recent years, including the use of slower-growing chick breeds, lower animal density, or combinations of those two concepts. The objective is to further improve animal welfare in the future. A new container system has made transport more animal-friendly, and new, responsible and careful slaughtering procedures have been implemented. Plukon works closely with its partners to improve animal welfare across the entire supply chain.

Looking forward

Developing innovative farming concepts

- Increasing the number of chickens subject to improved animal welfare.

Innovation in transport and slaughter

- Innovative container system (ATLAS) for improved and more efficient supply to slaughterhouses to be implemented at 7 sites by 2025.

Developing innovative farming concepts

Plukon is also a big player in organic, free-range and other concepts in which slower-growing chicken breeds are used. In processing over 1.6 million 'concept chickens' a week, Plukon contributes to more animal welfare. Demand for these types of concepts is growing and is expected to further increase over the next few years.

The Business Benchmark on Farm Animal Welfare Report 2018

The Business Benchmark on Farm Animal Welfare (BBFAW) included Plukon Food Group in 2018 in a benchmark of food production companies. They assessed a total of 63 producers for criteria to address and improve animal welfare. Plukon is listed for the first time and entered in the category of companies making progress in animal welfare (category 4 of 6).

Increase in the number of chickens subject to stricter animal welfare standards

Good Brood Chicken, free-range, organic, FairMast, Initiative Tierwohl, DUC organic and DUC Certifié

2018 +12% versus 2017

2017 +30% versus 2016



Regular Chicken

Regular chicken meat scores highly on the criteria of food safety, affordability and environmental sustainability.

Good Brood Chicken

The Good Brood Chicken is a slower-growing breed. The concept has a focus on responsible feed and chickens' living environment.

Free-Range Chicken

Free-range chicken meets the EU standard for free-range products; these chickens also have access to a covered coop. This chicken is produced from a slow-growing breed.

Organic Chicken

Plukon Food Group maintains a chain of farms in the Belgian Ardennes and France which comply with the strict requirements set for organic poultry farming.

Poultry farmers who supply to Plukon, raise broilers according to the very latest animal welfare standards. The innovative farming concepts are based on advanced standards for criteria such as slaughter age, speed of growth, space to roam around, distractions, barn enhancements, feed and daylight. Specifications per concept are listed on the Plukon [website](#).

Initiative Tierwohl (ITW) is a joint initiative of suppliers and large retailers in Germany. Retailers pay an additional contribution per kilo of sold meat, which is used to finance projects to improve animal welfare on poultry farms, such as lower stocking densities and material for distraction.

Free-Range Chicken: 10th Anniversary

In 2017, it was 10 years ago that the Free-Range Chicken concept was launched, which Plukon celebrated together with the poultry farmers involved, the Dutch Animal Protection Foundation and the Albert Heijn retail grocery chain. What started out small has become a solid product concept which is now a fixture on supermarket shelves across the Netherlands, thanks to collaboration and a large number of pioneers.

Plukon has achieved its goal of exclusively supplying chickens reared based on this concept to German retailers. In the event of further growth, Plukon will continue to supply chickens based on this initiative.

Developing new concepts together

Enterprising poultry farmers made it possible for Plukon to meet the growing demand for animal welfare measures. Plukon has taken a leading role in this process and has been discussing needs and requirements from the market with customers. Additionally, initiatives by stakeholders, including the European Broiler Ask, play a role in this as well. This European collective of civil-society organisations sets targets for improved animal welfare in 2026. These targets are endorsed by various food and beverage producers and retailers. Plukon is a member of a feedback group along with various poultry farmers to discuss opportunities and dilemmas to be explored. This ensures that all parties gather together to develop a viable concept.

In 2018, Plukon and the German Animal Protection Society (Tierschutzbund) began construction on barns for free-range chickens in Germany under their own label, FairMast.



Innovation in transport and slaughter

Monitoring animal welfare during capture and loading

There is a growing focus on animal welfare during the capture, loading and transport of broilers, both in the broiler industry and elsewhere. Plukon, poultry farmers and companies engaged in the capture of animals aim to capture, unload and slaughter poultry with the least amount of discomfort. The industry attempts to make improvements by coming up with new solutions together. Preventing injuries during capture remains a combination of management at the broiler farm, during the capturing process, and the chicken breed involved. Plukon notes, for example, that damage caused to wings as a result of capture occurs far less frequently in slow-growing chicken breeds. This issue is being addressed within the quality assurance systems,

and employees who work with live animals have been attending an accredited course for this purpose.

Lower-impact transport

Plukon maintains strict procedures and guidelines in handling broilers when transporting the animals from farmers to the slaughterhouse. The company has partnered with Marel Poultry to develop a new, more animal-friendly system with transport containers which are equipped with a large opening, to ensure that the broilers are properly distributed. The container is placed on the conveyor belt prior to stunning; this eliminates the need to unload the animals from the containers. This reduces the amount of stress, constriction and damage to wings. Our site in Maasmechelen, Belgium, has been using this technique since 2016, while our site in Goor, the Netherlands, has been using it since mid-2018.

'No more need for antibiotics since the launch of FairMast'

'In December 2018 we launched the FairMast concept, an animal-friendly farming system for poultry developed by Plukon and certified in accordance with the standards of the German Animal Protection Society. We currently have broilers that reach their slaughter weight in a minimum of 56 days, which is significantly slower than commonly used systems, in which broilers reach this weight in 36 to 38 days. FairMast permits a maximum of 25 kilos of live weight per square metre, versus 39 kilos per square metre under the prevalent systems used in Germany. We keep a slower-growing breed, the Hubbard, which is a highly resistant and dynamic breed. We have noticed in the animal behaviour that FairMast improves animal welfare. The broilers are curious and exhibit natural behaviour. Since we've begun using FairMast, our use of antibiotics and other medications for these animal has been reduced to nil, which is very encouraging!

At the same time, it also meets a public demand, as antibiotics resistance is a great cause for concern. Coupled with improved animal welfare, FairMast is a sustainable success story. These are also important reasons for persuading retailers and consumers to pay a little extra for their chicken. The label of the German Animal Protection Society, which we print on the packaging, helps consumers make their choices. ODEGA Group has a firm belief in FairMast, and we have two years to prove that this is also successful from a commercial point of

view. FairMast requires an additional investment from us, and we have signed a contract with Plukon which enables us to do so. However, since we do need economies of scale in order to create a revenue model that remains viable in the long term, the ODEGA Group intends to open an officially recognised demonstration farm to persuade more German companies and consumers to switch to FairMast.

A permit application is currently pending for another barn which can accommodate FairMast. We're doing this despite the fact that the concept has yet to prove that it's a viable revenue model. But like I said, we have every confidence in this system. European regulations will promote animal-friendly farming systems with less use of antibiotics in the future. We intend to eventually implement the FairMast system for all our chickens. We regard Plukon as a reliable partner that supports us in achieving our goal.'

Detlef Brauer

Managing Director, ODEGA-Gruppe
Letschin, Germany



'Plukon improves animal welfare across its entire operation'

'Plukon is committed to developing solutions to the various social challenges faced by the poultry industry. The company has been involved in improving animal welfare, reducing the use of antibiotics and minimising the environmental footprint.

They have demonstrated their positive impact through their innovative 'Windstreekstal' bar for broilers, which combines various improvements in animal welfare with strong sustainability features. The Windstreek system accommodates 26,000 broilers on a maximum of 25 kilograms per square metre. It offers excellent air and food quality and low carbon emissions. This demonstrates that sustainability and animal welfare can be easily combined. Plukon received the Best Innovation Award of Compassion in World Farming in 2016.

In 2018, Plukon was a newcomer on our Business Benchmark on Farm Animal Welfare (BBFAW). This ranks the world's largest 150 food production companies classified at level 1 – companies which have demonstrated to be progressive in terms of animal welfare – to level 6 – companies where we find no evidence that animal welfare is on the agenda. Plukon entered the ranking as a level-4 company: these are companies which are making progress in implementing animal-friendly measures. This is a considerable performance for a newcomer, and it demonstrates Plukon's

commitment to improving the welfare of farm animals. There is still some room for improvement – for example, Plukon could provide more information about their transport times, stocking densities, and the impact of welfare measures, all of which are points of concern among consumers. Plukon would also do well to set targets to further improve animal welfare in their production chain and to report on this on an annual basis.

Compassion in World Farming encourages all poultry firms to use better breeds and improved living conditions for broilers, as described in the European Chicken Commitment. This involves a maximum stocking density of 30 kilograms per square metre, the use of slow-growing breeds with demonstrably more animal welfare, and improved environmental standards. Plukon has been making great progress in this area. We welcome their ongoing commitment to improving animal welfare and look forward to continuing to work together over the next few years.'

Shelley Morris

Food Business Manager, Compassion in World Farming (CIWF)



Plukon runs its own lorries and works with external transporters. The same rules safeguarding animal welfare apply to both:

- Good loading of the containers in the lorries and the correct use of tarpaulins contributes to improved air circulation in lorries.
- Scheduling the shortest possible journey times and waiting times and avoid peak times around major cities.
- Shortest possible waiting times at the slaughterhouse for unloading the lorries.
- The reception area is well-ventilated, has blue lighting and is designed to generate the least amount of noise and minimum vibrations.

Responsible slaughter with MCAS

In MCAS, the chickens are stunned in phases using a mixture of carbon dioxide and oxygen until they are unconscious. This is known as Multiphase Controlled Atmosphere Stunning (MCAS) stunning. After this, the carotid artery is cut so that the animal is bled until death occurs. Scientific research has shown that this method of slaughter is more humane than the global standard system of using an electrically-charged water bath. The percentage of animals that are stunned effectively is virtually 100 per cent. Plukon has continued to explore ways of further reducing impact on animals in recent years. The anaesthetic has been extended to 5 minutes, whereby the animals are completely stunned without any visible discomfort. This method was tested in Mouscron, Belgium in 2013 and is currently also used at other sites.

Making animal welfare measurable before and during slaughter ensures that Plukon can take targeted and effective measures. Plukon and the University of Ghent prepared a study in 2018 to monitor indicators for animal welfare objectively and automatically. For example, Plukon makes video recordings in the slaughterhouse to automatically record the number of foot pad lesions. This data is available and comparable for multiple parties in the poultry meat supply chain.

Greenwell: greening the poultry industry

Every link in the poultry industry contributes to sustainability in its own way, ranging from feed suppliers to poultry farmers and from slaughterhouses to scientists. Within each step of this supply chain, we can make choices that help reduce environmental impact, improve animal welfare and increase efficiency. However, this also creates a number of dilemmas. While slower-growing chicks improve animal welfare, they require more feed, which means a larger impact on the environment. In order to identify these choices, Plukon has been a member since 2018 of the Greenwell consortium together with various other partners, including Wageningen University & Research (WUR) and Aviagen (genetics). This public-private project is concerned with how the supply chain can become more sustainable using 15 criteria ranging from the environment and animal welfare to economic viability. A specially developed assessment model makes choices measurable and transparent. What, for example, is the impact of regionally grown feed versus feed imported from overseas? What is the impact of the various forms of accommodation? What are effective measures for reducing phosphate loss and emissions of particulate matter? Results are expected at the end of 2021.





Animal health

The challenge

Healthy broilers are the backbone of a healthy industry and responsible food production. Improvements in animal health result in reduced use of antibiotics and better animal welfare.

Our solution

In order to reduce the risk of antibiotic resistance among humans and animals, Plukon works together with poultry farmers and supply-chain and other partners in scientific and sector research into preventing animal diseases and a selective and restrictive use of animal medication. This is in line with national action plans for reducing antibiotic use and specific customer requirements.

Looking forward

Reducing antibiotic use

- Minimum of 50% antibiotic-free broilers within all concepts (i.e. regular concept and concepts based on improved animal welfare) across all countries where Plukon operates in 2025.

Early feeding for improved animal health

- Promoting the use of early feeding across all countries where Plukon operates.

Reducing antibiotic use

Plukon Food Group is aiming for healthy animals and for the restrictive and selective use of antibiotics. Together with broiler farmers, Plukon would like to reduce the use of antibiotics to the minimum level that is required to guarantee animal welfare.

In order to encourage poultry farmers to use fewer antibiotics, Plukon became the first company in the poultry industry in 2011 to reward farmers of antibiotic-free broilers. Through information and awareness, Plukon draws attention to measures such as an optimum broiler house climate, good hygiene and the highest-quality feed. In addition, Plukon applies strict hygiene measures in the slaughterhouse to ensure employee safety and food safety of the poultry meat.

The World Health Organisation (WHO) monitors antibiotic use worldwide to prevent bacteria from becoming resistant to it. WHO has placed specific antibiotics for farm animals on a critical list, and has called on farming sectors to eventually ban the use of these ‘reserve antibiotics’. Since 2018, Plukon has been working with poultry farmers and buyers in the Netherlands and Germany to meet this requirement. The company is expecting a similar development in other countries and markets.

Improved management practices such as climate management, litter management and the transition to new concepts with lower stocking densities or slower-growing breeds contribute to reducing the use of antibiotics (see table 1).

Table 1. Antibiotic-free broilers per farming concept
(as a component of the number of processed chicks per farming concept)

	Good Brood Chicken*	Free-Range Chicken*	Organic Chicken**	Regular Chicken*
2018	88%	96%	94%	44%
2017	87%	96%	96%	33%
2016	91%	99%	90%	32%
2015	91%	97%	89%	30%
2014	85%	99%	94%	22%

* The broilers are slaughtered in the Netherlands and kept in the Netherlands, Belgium and Germany.
 ** The broilers are slaughtered in Belgium and originate from Belgium.

Dutch poultry farmers have made great progress in reducing antibiotics by 50% since 2009.

'Ongoing improvement, with Plukon as our partner'

'REWE markets more than 80% of its fresh poultry meat under its own label: Mühlenhof in our Penny Discount Stores and Wilhelm Brandenburg in our REWE supermarkets. REWE is therefore assuming responsibility for safety and sustainability in the poultry supply chain, working closely with our suppliers. Plukon has been a leader in this area. In 2013, for example, we asked for greater transparency, particularly in terms of animal welfare and GMO-free feed. Plukon embraced this challenge wholeheartedly and supported our goals. We want a maximum of 35 kilos of chicken per square metre and feed without GMO. This has made Plukon one of the first suppliers that earned our ProPlanet certificate.'

Our needs, as expressed at the time, have since become statutory requirements. This encourages REWE Group to make ongoing improvements, and Plukon is an outstanding partner in that respect. Reducing the use of antibiotics and improving animal-friendly production are key issues, both in Germany and elsewhere. Early feeding systems

have been developed to improve animal welfare and reduce the use of antibiotics. A lack of water, feed and light can potentially cause chicks to lose up to 10% of their body weight due to stress and hydration. This results in less resilient animals that develop health problems during further growth and in transit. In the new system, equipped with 2-level breeding containers, just-born hatched chicks can easily move from the top level to the bottom level, where they have access to water, feed and light. The chicks are also transported inside this bottom layer. We tested this early-feeding system together with Plukon at two hatcheries in early 2018. Almost all poultry meat purchased by REWE now originates from these types of animal-friendly hatcheries offering early feeding.'

Dr. Ludger Brelöh

Director of Strategy & Innovation in Agriculture
REWE Group



Plukon firmly believes in the advantages of early feeding, which was implemented across the entire free-range chicken supply chain in 2017.

In 2019, we will also start charting the use of antibiotics in other countries in which Plukon operates. Plukon seeks to reduce the percentage of antibiotic-free broilers within farming concepts to a minimum of 50% by 2025.

Preventing animal diseases

Since prevention of animal diseases is in the interest of all links in the food supply chain, Plukon works closely with broiler farmers on prevention and is involved in scientific and industry research. The objective of the research is to improve animal welfare across the entire poultry supply chain, and to identify and implement measures based on the latest scientific insights.

Together with Wageningen Bioveterinary Research (BVR) at Wageningen University & Research (WUR), Plukon performed research in 2017 and 2018 into controlling pathogens such as campylobacter. The impact of various farming systems has been analysed and a case study has been conducted involving special feed based on prebiotics. This study serves as a guide for finding other leads.

Early feeding for improved animal health

To further improve animal welfare, Plukon began applying early feeding across the entire free-range chicken supply chain in 2017. The company also aimed to use early feeding in the regular broiler segment in 2018, starting in the German market. Early feeding has since been implemented at two hatcheries in Germany for the regular poultry supply chain. In addition, there are a growing number of initiatives where eggs hatch in the barn and therefore have direct access to feed and fresh drinking water. Although chicks have naturally nutritious yolks at their disposal, research has shown that chicks develop better if they are also given access to other sources of energy directly after hatching. This contributes to health and therefore to a further reduction in the use of antibiotics.



Circular and efficient business operations

The challenge

Plukon sees opportunities within the sector to close loops and become more actively engaged in circular business. Waste flows are created in the poultry industry and plastic is the main packaging material used by the company in view of food safety. In addition, Plukon's production sites also consume energy during the production of poultry products and fresh ready-to-eat meals. Logistics involving broilers and meat products also contribute to the emission of greenhouse gases and particulate matter.

Our solution

Plukon Food Group aims to add value to rest flows through more circular business operations and reduce the environmental impact of packaging and processes. The energy consumption and emission of greenhouse gases in the poultry supply chain have decreased significantly in recent years. Plukon invests in energy-efficiency, renewable energy, reduction of water consumption and transport distance and duration.

Looking forward

Circular solutions in the Netherlands

- 20% reduction in packaging materials by 2025.
- 25% of the packaging materials is renewable or made from recyclable materials by 2025.
- 100% of packaging will be fully recyclable by 2025.

Saving energy through energy-efficient production

- Produce 2.5% more energy-efficiently in 2025 versus 2015.

Reducing water consumption

- Reduce water consumption per tonne of live weight (m3/kg) by 5% between 2015 and 2025.

Circular solutions

Packaging policy

Plukon Food Group mainly uses plastic for packaging its products, as this is a lightweight material which is easy to use and ensures the shelf life and food safety of the product. Since plastic is made from oil, which is a fossil fuel, and is designed for single use, it has a harmful impact on the environment. In addition to an interest among consumer and retailers in this issue, the European Commission created regulations in 2018 to reduce the amount of plastic packaging over the next several years. Plukon, for its part, has developed a packaging plan in order to reduce the impact of its packaging.



Plukon Food Group's packaging plan for the Dutch market

• Less

Use fewer material while at the same time maintaining shelf life and functionality, e.g. thinner packaging, a different design, and measures to reduce waste during production.

Target: 20% reduction in the use of plastic packaging by 2025.

• More sustainable

Use more renewable or recycled materials.

Target: 25% of the packaging materials will be renewable or recyclable materials by 2025.

• Recyclable

Ensuring the packaging is recyclable and communicating this to consumers on the packaging, for example by using only one type of material or materials which can easily be segregated for recycling purposes. This also means that Plukon will stop using black plastic.

Target: 100% of packaging will be fully recyclable by 2025.

The target is to use these principles in order to make meal packaging more sustainable in 2019. The current packaging materials will be inventoried first. Additionally, Plukon aims to stop using black plastic in the Netherlands in 2019, as this cannot be recycled in the current recycling system. The BBQ product range, in particular, was packaged in black plastic. It is a significant challenge to improve the design of this and other types of packaging. For example, in addition to the size of the new packaging needing to comply with the current production and transport requirements, the product's shelf life and food safety must also be assured. This is because the environmental gains achieved by slightly thinner packaging must not be cancelled out by increased food waste. Plukon will therefore be testing the alternative packaging types extensively in its own laboratory.

Creating value from by-products

Animal by-products, such as blood, feathers, intestines, heads and feet are generated during the slaughter of broilers. These by-products are not intended for human consumption but are highly suitable for processing into feed for pets or fertiliser. Plukon Food Group has together with five other poultry abattoirs established Noblesse Proteins B.V. in order to create more value for these by-products. Noblesse processes animal by-products into semi-finished goods, which are sold to various companies including pet food manufacturers.

Manure is another by-product of poultry farming. Research by the research company and consultancy CE Delft has shown that poultry manure is highly suitable as a source of energy. An incineration facility located in Moerdijk, the Netherlands, incinerates the manure and uses it to supply green energy to 70,000 homes on an annual basis. The recycling of the ashes produces valuable phosphor and potassium, which is used by French and Belgian farmers to grow food crops. This is how the processing of poultry manure contributes to circular agriculture. Of the total of nine applications for poultry manure researched by CE Delft, this turned out to be the solution with the greatest environmental gains.

Saving energy through energy-efficient production

Improving energy efficiency is an ongoing process for Plukon's production and slaughtering sites, since saving energy reduces operational costs.

The bulk of the energy is used to refrigerate and freeze meat. The effective cooling of slaughtered broilers for the production of fresh and frozen meat is vital in order to guarantee food safety. The meat needs to be cooled rapidly from around 37°C to lower than 4°C. Only then can Plukon satisfy the high food safety and shelf life requirements. We mainly use heat to heat the by-products of slaughter and waste streams for processing into feed for animals that do not enter the human consumption supply chain.

In 2017 Plukon invested in a new, sustainable production facility in Wezep, the Netherlands. The company decided to design the new production lines primarily for vegetables, salads and ready meals. Thanks to investments in sustainable measures, the building has a BREEAM certification score of 5 stars, which means it complies with the highest sustainability requirements. This has made Wezep into the first facility of its kind without a gas supply. The plant saves a considerable amount of energy through heat recovery on refrigeration systems, heat pumps, our own water source and more efficient logistics processes.

The new abattoir in Poland opened in 2018: it is efficient and equipped with state-of-the-art machinery, with effective logistics arrangements in place. The plant has been tested extensively and its processes have been optimised. We expect that, if the abattoir is running at full capacity in 2019, it will consume 5% less energy per tonne of live weight than the other Plukon abattoirs.

In addition, a larger production volume also ensures a more efficient use of facilities. Plukon received a new permit in 2018 to increase its capacity in Blokker, the Netherlands, from 220,000 to 300,000 units of poultry per day. Prior to making these modifications, the company consulted with local residents and implemented additional measures to prevent potential disturbance.

'Dealing with animals responsibly is a top priority'

'Since our joint venture with Plukon Food Group was launched in March 2017, we have regarded Plukon as the right partner for achieving our goals. We are a family business and were very careful in deciding to whom we would be selling the shares in our company. We opened our state-of-the-art production site in Sieradz, Poland, in July 2018. We worked with Plukon to build a slaughterhouse without needing to make any compromises, using the most sophisticated technologies. We are all focused on the balance between quality, efficiency and economies of scale in order to achieve the best result. Plukon gave us the opportunity to double our budget for our new buildings. Plukon's production site in Sieradz is one of the largest investments in the Polish poultry industry and provides employment to more than 400 people. This provides Plukon with exciting growth prospects, both in the large and high-potential Polish market and in other countries.

State-of-the-art technology enables Plukon Sieradz to increase its production level to 1.2 million chickens a week. We expect to be able to achieve this level by early 2020. We will be generating 50% revenue growth thanks to the new site. However, this should obviously not come at the expense of animal welfare.

Dealing with animals responsibly is a top priority. For example, we replaced the standard electric stunning method with a significantly more animal-friendly method based on a gas mixture of oxygen and carbon, where we gradually increase the level of carbon. Only animals that have been stunned are submitted to the production line. This is less stressful than in the traditional method, where chickens are hung on the line first before being stunned electrically.

The new production site will also improve our performance from an environmental perspective. For one, we use a special system for heat recovery, which we use to reduce our energy consumption (propane gas). In the future, we want to start using clean water produced by a water purification plant. This requires that we install filters first, but we will be saving a considerable amount of water. In addition, we intend to start using less plastic in our packaging materials.'

Łukasz Wyrebski

Managing Director, Plukon Sieradz, Poland



Each of our production facilities maintains its own energy-efficiency plan, which makes the performance transparent and allows for relevant comparisons. The German slaughtering sites had received the ISO 50001 energy certificate in 2018, thereby demonstrating that they are working on permanently reducing energy consumption. These sites have reduced their power consumption by 1.4% and their gas consumption per tonne of live weight by 4.3% since 2015 (see table 2). The target is to produce 2.5% more energy-efficiently in 2025 than 2015. The increase in energy consumption in 2018 is a result of the larger production volume of

by-products processed. The rendering of the by-products by steam and heat ensures that the protein in the product becomes soluble. The volume of by-products is linked to the volume of the total number of animals slaughtered.

Table 2. Energy consumption per tonne of live weight (kg)

	Electricity kWh per tonne of live weight (kg)	% difference from 2015	Gas m³ per tonne live weight (kg)	% difference from 2015
2018	124.1	-1.4%	4.4	-4.3%
2017	120.2	-4.5%	4.2	-8.7%
2016	121.4	-3.5%	4.5	-2.2%
2015	125.8	0.0%	4.6	0.0%

* Sites: Blokker, Dedemsvaart, Goor, Maasmechelen, Mouscron, Storkow, Brenz and Gudensberg.

Renewable energy

Plukon Food Group is investing in the use of energy from renewable sources. In 2018, the infrastructure was prepared at the Wezep production site for solar panels scheduled to be installed in 2019. A windmill became operational at the Maasmechelen site in late 2018, which provides the production site with an average of a quarter of the total use of energy consumed. The windmill produces around 4,500 MWh in green energy annually, which is equal to the consumption of 1,285 homes.

Poultry farmers are also using a growing amount of renewable energy. A 2018 sample taken in 240 barns showed that sustainable heating systems (i.e. biogas and biomass) accounted for 31%. More than 23% of barns are heated using biogas sourced from incineration plants. The green energy is then fed back into the grid. In 8% of cases, barns are heated using biomass including wood (pallet) heaters and straw incineration systems.

Poultry farmers with a focus on the future

The farm owned by the Weersmann family in IJterbeck, Germany, heats its poultry barns using biogas from its own biogas plant, which has a capacity of 690 kW and runs on 35% manure. Around 700 tonnes of poultry manure and manure produced by their own dairy cattle and from the pigs at an adjacent partner farm is needed per year.

Reducing water consumption

Plukon Food Group also aims to reduce water consumption at all production sites by implementing a variety of measures. Water consumption per tonne of live weight increased slightly from 2015 as a result of control measures to further improve slaughter hygiene (see table 3). Extra water is used for the hygienic purification of the meat and the production line.

At the Storkow site, the water is reused after it has been purified mechanically, for example as cleaning water. As the water is recovered hotter than tap water (20 – 40°C), this measure saves both water and energy.

Filtering 28 million litres of rainwater

Plukon installed a 'wadi', i.e. a sustainable water filter, at its Wezep site. The wadi has been filtering approximately 26 million litres of rainwater annually since August 2018. This water would otherwise have been discharged to the water purification facility, which can cause disturbance during heavy rainfall. This water transport also costs a significant amount of energy. Local residents were actively involved in the construction of the wadi, while primary school pupils attend classes on water on-site.

'Monitoring our journeys enables us to improve our efficiency'

'In order to optimise our logistics efficiency, we standardise our transport operations for the entire company by using a Transport Management System (TMS). This TMS currently directs all our operations in Germany, to be followed by the Netherlands later this year. In the period ahead, we will be implementing TMS at all our 17 sites across Europe. Each type of crate has its own unique Plukon standard number, and we record each journey in a shared, coordinated system. This enables us to monitor our journey planning and improve efficiency. While savings are primarily financial in nature, a higher loading rate also

enables us to reduce our carbon emissions. We also seek optimisation in conjunction with our partners. In 2018, for example, we optimised product load together with several clients. We managed to improve efficiency by using pallets and crates more efficiently, which resulted in a lower number of crates to be run through the washing facilities.'

Koen Nijhuis

Logistics Manager, Plukon Food Group



Table 3. Water consumption

	Water (m ³ per tonne of live weight (kg))*	% difference from 2015
Target for 2025		5% less water consumption than in 2015.
2018	3.36	+5.0%
2017	3.40	+6.3%
2016	3.50	+9.4%
2015	3.20	0.0%

* Sites: Blokker, Dedemsvaart, Goor, Maasmechelen, Mouscron, Storkow, Brenz and Gudensberg.

'In achieving logistics efficiency, animal welfare always comes first'

'We commissioned a new container system manufactured by Atlas Marel at our site in Goor, the Netherlands, in 2018 which we first implemented at our Maasmechelen site in Belgium back in 2017. This is a more animal-friendly system, since the containers no longer need to be tilted and the chicks no longer need to be removed from the container during the remainder of the process. This causes less discomfort for the animals, and the system is also more efficient because the containers have an extra load, which makes it possible to transport more animals in each container. In achieving logistics efficiency, Plukon always puts animal welfare first.

We will also be implementing this system at our other Belgian slaughterhouse, and will be extending it over the next few years until it is the standard at all our 11 slaughterhouses. Things are proceeding relatively slowly, since this involves a radical change. We need to refurbish our slaughterhouses in order to accommodate the new

system, as well as to make some modifications to our lorries. There is also the fact that this system is twice as expensive as the most commonly used system. In addition to improving animal welfare, it also improves efficiency. We completed 0.8% fewer journeys in 2018 than in 2017, and in 2017 we completed 0.7% fewer journeys than in 2016 (in Belgium). If you compare this with the large volumes we transport – in the Netherlands, Belgium and Germany this added up to more than 860 million kilos in 2018 – the impact is substantial. We also more frequently use longer lorries for transporting live animals.

Nico van den Hoorn

Planning and Logistics Manager,
Plukon Food Group Agribusiness



Efficient transport

Plukon Food Group manages its logistics operations as efficiently as possible. This accelerates not only the operational processes but also reduces energy consumption, and carbon and particulate matter emissions. Plukon has been using innovative container systems at two of its sites (Maasmechelen and Goor) since 2016. It optimised the load openings and created additional space, so that a larger number of animals can be transported without infringing on the available space. This translates into a lower impact on the environment.

The number of journeys decreased slightly in 2018, due to a variety of reasons including several more efficient supply systems. At the same time, the number of kilograms of live weight per kilometer is decreasing; this is because the growing number of chickens based on a specific concept (Initiative Tierwohl, Good Brood Chicken, Free-Range Chicken, etc.) makes it more challenging to optimise transport scheduling. Each of these models requires its own individual planning, from day-old chicks to the slaughterhouse (table 4).

Table 4. Transport of live chickens from the poultry farmer to the slaughterhouse*

	Number of journeys	% difference	Total distance (km)	% difference	Kg live weight/km	% difference
2018	59,174	-0.9%	18,600,699	+0.5%	46.3	-0.4%
2017	59,728	+3.4%	18,505,686	+4.9%	46.5	+1.5%
2016	57,739	+3.4%	17,647,680	+8.2%	47.2	-5%
2015	55,836	-	16,311,418	-	49.7	-

* Data for the Netherlands, Belgium and Germany.



Human resources and society

The challenge

Demand for skilled workers is expected to continue to increase over the next few years, and attracting and retaining talented and motivated employees is essential to a growing organisation such as Plukon. Safe working conditions and healthy employees result in lower sickness absence rates and lower staff turnover.

Our solution

Plukon Food Group fosters a safe working environment for its employees and is committed to long-term employability and training and education. A trainee programme established in 2018 provides a high level of training and support to employees.

Looking forward

Training and development

- Training an average of 10 trainees per country a year as part of the international Plukon traineeship in the Netherlands, Belgium and Germany in order to increase the number of new hires and improve promotion within the company.

Social compliance

- More than 65% of employees will participate in the Preventive Medical Examinations by 2025.

Healthy and safe working environment

- Less than 6% average sickness absence rate across all sites by 2025.
- 30% reduction in the number of accidents resulting in absence at all sites by 2025 versus 2018.

Employees

Training and development

Traineeship

Giving passionate and driven recent graduates/entry-level workers the opportunity to develop quickly and efficiently during the first few years of their career: this is the objective of the 2-year Plukon traineeship, which was developed in 2017 and went live in 2018. This personalised training programme provides trainees with the opportunity to take on challenging projects, attend training courses, and take field trips to international branches, as well as opportunities for personal development. An optimal kick-start to a Plukon career in which participants get to develop into specialists, supervisors or managers. Our goal for 2019 is to launch a pilot project with a group of trainees at our German and Belgian sites.

5 trainees in 2018

- 2 Production trainees
- 2 Quality Assurance trainees
- 1 Supply Chain trainee

Peer review

Plukon invests in continuing to challenge new and current employees and allowing them to continue to grow, to ensure that everyone remains motivated and to make maximum use of everyone's talent. The company supervises young talent with between 0 and 2 years of work experience in peer review sessions. Based on various issues and challenges, they learn more about themselves, acquire professional knowledge and learn and grow together. A total of 8 peer review sessions are scheduled over a 2-year period. Internal coaches supervise the group of 6-8 persons.

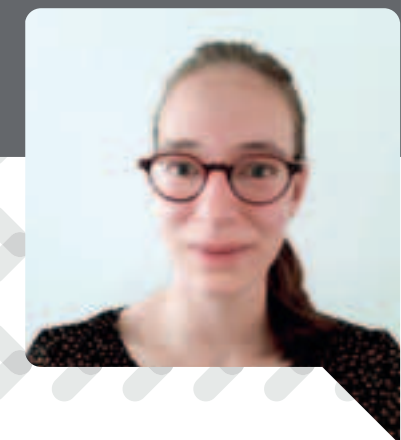
'Plukon is an open organisation that actively supports its employees by sharing input and ideas'

'I joined Plukon in January 2019, after earning my degree in Food Technology: Sustainable Food Process Engineering. I initially applied for a different position, but during the interview it turned out to be not the right fit for me. Plukon then went looking for a job that would better suit my skill set. Junior Manager Process Yield Optimisation is a newly created position. My job is to check operating systems in the slaughterhouse and I'm involved in developing new systems focused on improving animal welfare and efficiency. I analyse all data and identify potential for improvement. The increased automation is generating a massive amount of data, and I will be using this data in this new role. I am currently employed in the Dedemsvaart slaughterhouse, but will also be implementing

the systems at other slaughterhouses in the Netherlands, Belgium and other European countries. I regard Plukon as an open organisation that actively supports its employees by sharing ideas and input. I discovered this right away, when the company decided to look for a job for me that suited me personally. The training opportunities are excellent. I know several people who are attending the trainee programme, and they are very positive about it.'

Jorinde Mulder

Junior Manager Process Yield Optimisation,
Plukon Food Group



We invest in attracting new talent and using everyone's personal strengths.



We have a shared responsibility for a safe and healthy work environment for all employees. Passion for the work and personal development are always the central focus.

Standards and values

Plukon is an open organisation that provides room for feedback and abides by certain rules of conduct to ensure a pleasant work environment. One of our core values is to treat each other with respect. A code of conduct sets out that verbal or physical aggression, harassment and discrimination are not tolerated. Employees can discuss inappropriate conduct with an internal or external confidential advisor. Plukon maintains a Central Works Council and a European Works Council for Belgium, Germany and the Netherlands.

A whistleblower policy allows employees to report any misconduct, whereby their personal identity remains protected. This option has been available to employees in the Netherlands since 2017, followed by Belgium and France in 2018. Plukon will be further developing this in conjunction with the Works Councils for the German and Polish sites in 2019. The policy was not invoked at Plukon in 2017 and 2018. Social audits are conducted at various Plukon Food Group

production sites in order to demonstrate to various purchasers that Plukon complies with social legislation, for instance on employment rights, ethics, competition, order, safety, the environment and animal welfare. Plukon Food Group received a positive assessment in 2017 and 2018.

Healthy and safe working conditions

Plukon's health policy focuses on education in the workplace, healthy nutrition and sufficient exercise. This is how Plukon promotes a healthy lifestyle, which contributes to the long-term employability of staff. Plukon and an external partner have begun serving and promoting healthy food in the cafeterias at two of our sites. The company also offers various training courses for managers on how to manage sickness absence. The Occupational Health and Safety Service and company doctors are responsible for implementing prevention measures, so we expect to further reduce sickness absence rates. During a pilot project for long-term employability in 2016 at one of our product sites, we explored together with several employees

to see whether less physically demanding work could be found for some members of staff in the immediate future. The pilot project received a follow-up, resulting in alternative work being found for three employees in 2017 and 2018. This is part of Plukon's policy to retain its employees, reduce sickness absence and increase labour productivity.

A total of 60% of employees participated in the Preventive Medical Examinations in 2016, the purpose of which is to avoid and reduce health risks among employees. Plukon conducts this checkup every three years, and will once again invite all employees to participate in 2019. The checkup is combined with an examination into psychosocial workload and a career survey. The target is a minimum participation rate of 65%. Since everyone deserves a chance to do useful work and to participate in the labour market, Plukon offers between 5 and 7 job seekers with limited employment possibilities with training and a place of employment every year.

Sickness absence

Plukon aims to reduce sickness absence rates at the company. The ergonomics of workspaces in the production facilities and in the offices were optimised in 2018. Despite the increased focus on health, and the training of managers in areas such as conducting sickness absence reviews, sickness absence rates increased in the Netherlands and Germany compared to 2016 (see table 5). We consider it our responsibility to work with employees to ensure a faster return to the workplace. Good support for employees who are ill, from the moment they take sick leave, helps to reduce absenteeism. The long-term target for 2025 is an average sickness absence rate of below 6%.



Table 5. Sickness absence
Average sickness absence (excluding pregnancy)

	The Netherlands	Germany	Belgium	France	Poland	Average
2018	8.3%	6.3%	3.7%	6.5%	2.4%	5.5%
2017	8.4%	6.5%	3.3%	-	-	6.1%
2016	7%	6%	4%	-	-	5.7%

Workplace accidents

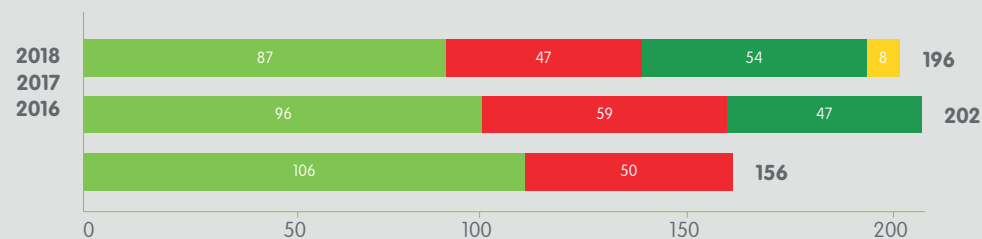
Plukon has made reducing the number of workplace accidents an everyday priority. By involving employees and managers in an action plan to address employment risks, Plukon aims to increase awareness in the workplace and to reduce the number of accidents. The number of accidents at the Dutch sites fell by 9% from the previous year for two consecutive years; this can be attributed to an increased focus on risk assessment and prevention. The number of accidents at our Belgian sites increased by 18% between 2016 and 2017 and subsequently fell by 20% in 2018. The ultimate goal, of course, is always zero accidents. Plukon continues to work on permanently

improving safety and aims to reduce the number of accidents by a minimum of 30% between 2018 and 2025.

The number of employees increased by 35% since 2016, mainly as a result of extensions in the French and Polish markets. All employees in the five countries were subject to a collective labour agreement in 2017 and 2018. In addition to its permanent employees, Plukon also works with temporary workers in order to be able to meet market demand with the appropriate level of flexibility. Plukon offered a permanent contract to a total of 40 Dutch temporary workers in 2018. More detailed employee data are available in Appendix 2.

Accidents

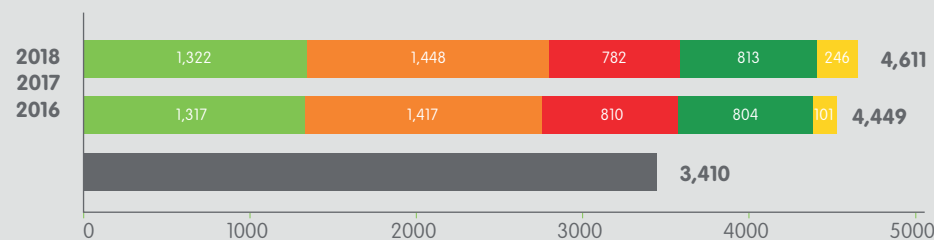
Number of lost-time accidents



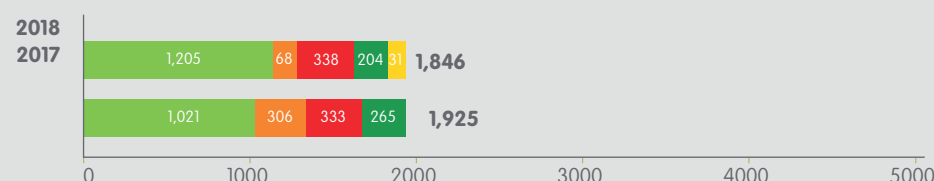
* The accident data for Germany falls outside the scope because the data is recorded using another method and, as such, cannot be compared.

Number of employees

Number of employees (excluding temporary workers)



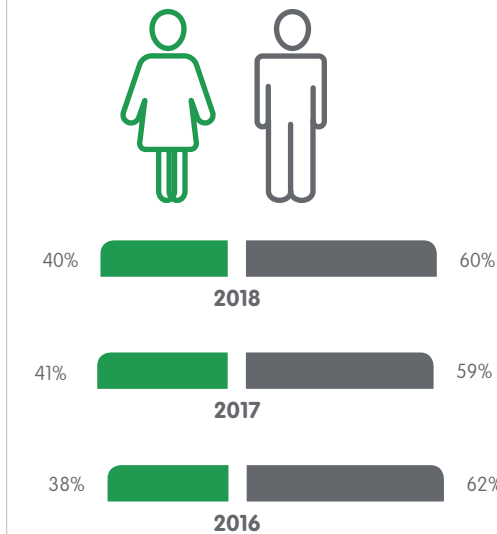
Number of temporary workers



Legend



Diversity



Society

Plukon Food Group conducts business in harmony with the environment. Through transparency, knowledge-sharing and dialogue, Plukon is an active participant in the public debate on food. Involvement in the local community is one of Plukon's key values.

Local sponsorship

Operating 18 sites spread across Europe, Plukon is linked to several local communities, both through employees who live nearby and due to the impact of our business activities in the vicinity. Plukon is accessible to local residents, organising tours and contributing to the local community by sponsoring local organisations and projects. Examples include the sponsorship of a sports club in Storkow and a foundation dedicated to supporting children from disadvantaged backgrounds (Deutsches Kinderhilfswerk).



About this report

This report has been compiled in compliance with the Global Reporting Initiative (GRI) standards and in line with the GRI Standards level Core. It covers the period from 1 January 2017 to 31 December 2018. Unless otherwise specified, the results relate to all business units of Plukon Food Group in the Netherlands, Belgium, Germany, France and Poland. Its scope and contents are based on the material topics and the information needs of stakeholders. Plukon Food Group aims to report on the CSR topics set out in this report every two years. For any questions and comments about this report, please feel free to contact us at info@plukon.nl.



Appendix 1: Glossary

A

Animal welfare

The physical and mental welfare of animals, measured using indicators such as behaviour, physiology, lifespan and reproduction. This term is often also used to describe an animal's quality of life.

ASC

Aquaculture Stewardship Council – a body that provides certifications for farmed fish, with the aim of reducing the impact of fish farming on the environment.

B

Belplume

A Belgian quality assurance system in which all parts of the poultry sector are represented.

Beter Leven certification

A certification issued by the Dutch Society for the Protection of Animals (Nederlandse Dierenbescherming) to support animal-friendly products.

BRC

British Retail Consortium – a British association of retailers representing the interests of its members in the retail sector at the local, national and European levels, which has set a number of standards for suppliers of foodstuffs.

BSCI

The Business Social Compliance Initiative is a platform established by companies with the objective of improving working conditions in the trade supply chain.

Business Continuity Management

A process for identifying the potential threats to an organisation and determining the impact on its operations if the threat were in fact to materialise.

BVR

Wageningen Bioveterinary Research – an institute affiliated with Wageningen University & Research that focuses on preventing, combating and controlling infectious animal diseases through research, diagnostics and advice.

C

CIWF

Compassion in World Farming – an international organisation whose aim is to safeguard animal rights, put animal welfare at the heart of the food supply chain, and raise consumer awareness.

CLA

Collective Labour Agreement – a collective written agreement laying down terms and conditions of employment. This may cover, for instance, pay, allowances, overtime, working hours, probationary periods, notice periods and retirement.

F

FairMast

Chicken concept involving a slower-growing breed which has been awarded one star by the Deutsche Tierschutzbund.

G

GFSI

Global Food Safety Initiative – a partnership between major retailers, food producers, other businesses in the food supply chain, and scientific and other experts in food safety.

GRI

Global Reporting Initiative – an organisation that produces international standards for reporting on sustainability and corporate social responsibility (CSR).

H

HACCP

Hazard Analysis and Critical Control Points – a food safety management system based on analysing and monitoring biological, chemical and physical hazards in the production process, in procurement and from processing through to production, distribution and consumption of the finished product.

I

IFS

International Food Standard – a food safety standard drawn up by Germany's sectoral organisation for food distributors.

IKB Kip

Dutch supply chain quality control system covering the entire poultry sector.

ILO

The International Labour Organization is a specialised organisation of the United Nations concerned with labour issues.

Initiative Tierwohl

A joint initiative between suppliers, major retailers and the German agriculture ministry to improve animal welfare in the poultry farming sector.

L

Long-term employability

The principle that throughout their working lives, employees should have real employment opportunities and that the conditions should be in place for them to continue to operate in their current and future work, without detriment to their health or welfare.

M

MCAS

Multiphase Controlled Atmosphere Stunning – most humane system of its kind that stuns chickens for meat production in phases using a mixture of carbon dioxide and oxygen.

MSC

Marine Stewardship Council – a body that defines standards for fish products to be certified as originating from sustainable fisheries. Sustainable fisheries manage fish stocks in a sustainable manner causing as little damage as possible to marine life and minimising bycatch.

Municipal Health Service (GD)

The Municipal Health Service (GD) is dedicated to the protection of farm animals and pets, in the interest of the animal, the pet owner and the community at large. The Municipal Health Service collaborates with animal owners, veterinary practices, governments and businesses.

N

NEPLUVI

The Association of Dutch Poultry Processing Industries (Vereniging van de Nederlandse Pluimveeverwerkende Industrie)

O

OECD

The OECD Guidelines contain recommendations for multinational companies to deal with issues such as supply chain responsibility, human rights, child labour, the environment and corruption.

P

ProTerra Foundation

A foundation that encourages the increased use of sustainable agriculture products. It has a strong focus on non-GMO production.

Q

QS

Qualität und Sicherheit (QS) – Germany quality standards intended to ensure transparency and product safety in the food supply chain.

R

RSPO

Roundtable on Sustainable Palm Oil – a body that encourages the increased use of sustainable palm oil products.

RTRS

Round Table on Responsible Soy – a body that encourages the increased use of responsible soy.

S

Sustainable Development Goals

These seventeen targets are designed to ensure that a large number of major social problems, including malnourishment and lack of access to clean drinking water, are resolved by 2030. Companies and organisations contribute to achieving these global social challenges.

U

UN Guiding principles on Human Rights

These internationally accepted guidelines provide companies with recommendations on how to manage human rights.

V

Voedingscentrum (Netherlands Nutrition Centre)

Independent Dutch institute that provides information on good nutrition, food safety and sustainable food to consumers and professionals.

W

Wageningen UR

Wageningen UR stands for Wageningen University & Research, a collaboration between Wageningen University and a number of commercial research centres, based in the Dutch city of Wageningen.

WHO

World Health Organization – an organisation which aims to improve public health throughout the world.

S

Sickness absence

Failure to appear at work due to sickness, often measured by the indicator 'sickness absenteeism rate', which expresses the total number of employee sick days as a percentage of the total number of possible employee working days in the reporting period.

Appendix 2. Employee data

Number of employees

Number of employees (excluding temporary workers)

	The Netherlands	Germany	Belgium	France*	Poland**	Total
2018	1,322	1,448	782	813	246	4,611
2017	1,317	1,417	810	804	101	4,449
2016	-	-	-	-	-	3,410

Number of temporary workers

	The Netherlands	Germany	Belgium	France*	Poland**	Total
2018	1,205	68	338	204	31	1,846
2017	1,021	306	333	265	-	1,925

Share by contract type

Full-time share

	The Netherlands	Germany	Belgium	France*	Poland**
2018	84%	96%	93%	98%	100%
2017	82%	92%	87%	98%	95%

Share of permanent contracts

	The Netherlands	Germany	Belgium	France*	Poland**
2018	92%	85%	93%	97%	11%
2017	93%	82%	74%	98%	95%

Share of temporary contracts

	The Netherlands	Germany	Belgium	France*	Poland**
2018	8%	5%	7%	3%	89%
2017	7%	18%	26%	2%	5%

Diversity

Share of men

	The Netherlands	Germany	Belgium	France*	Poland**
2018	69%	58%	57%	51%	58%
2017	68%	59%	55%	48%	52%
2016	-	-	-	-	-

Share of women

	The Netherlands	Germany	Belgium	France*	Poland**
2018	31%	42%	43%	49%	42%
2017	32%	41%	45%	52%	48%
2016	38%	-	-	-	-

Number of lost-time accidents

	The Netherlands	Belgium	France*	Poland**	Total
2018	87	47	54	8	196
% men	75%	43%	69%	88%	-
% women	25%	57%	31%	12%	-

	The Netherlands	Belgium	France*	Poland**	Total
2017	96	59	47	-	202
% men	79%	66%	68%	-	-
% women	21%	34%	36%	-	-

	The Netherlands	Belgium	France*	Poland**	Total
2016	106	50	-	-	156
% men	86%	60%	-	-	-
% women	14%	40%	-	-	-

* Data for France is available since the acquisition of DUC in 2017.

** Data for Poland has been available since the opening in 2018.

Appendix 3. GRI table 2018

GRI 101: Foundation 2016

GRI 102: General disclosures 2016		Page reference
Organisational profile		
102-1	Organisational name.	Cover, p.1, Acknowledgments, p. 82
102-2	Activities, brands, products and services.	About the Plukon Food Group, p. 6-7
102-3	Location of headquarters.	About the Plukon Food Group, p. 6-7
102-4	Number of branches and sites.	About the Plukon Food Group, p. 6-7
102-5	Ownership and legal form.	Acknowledgments, p. 82
102-6	Markets and customers.	About the Plukon Food Group, p. 6 Supply chain, p. 12-13
102-7	Size of the organisation.	About the Plukon Food Group, p. 6-7 Forward Food Solutions, p. 8-9
102-8	Information about employees and other workers.	Human resources and society, p. 66-73 Appendix 2. Employee data, p. 78-79
102-9	Information about the supply chain.	Supply chain, p. 12-13
102-10	Significant changes to the organisation and its supply chain during the period under review.	About the Plukon Food Group, p. 6-7
102-11	Explanation of the precautionary principles.	Food safety and transparency, p. 36-41
102-12	External initiatives supported by the organisation or in which the organisation is involved.	Dialogue with stakeholders, p. 20-23
102-13	List of key memberships (including industry associations and/or national and international interest groups).	Dialogue with stakeholders, p. 23
Strategy		
102-14	Statement by the highest authority regarding the relevance of sustainable development for the organisation and its strategy.	Preface, p. 4
Ethics and integrity		
102-16	Description of core values, principles, standards and behavioural standards.	Food safety and transparency, p. 36-41 Human resources and society, p. 70
Governance		
102-18	Governance structure: The governance structure of the organisation, including committees falling under the remit of the highest managerial body. And the committee responsible for making decisions on economic, environmental and social issues.	CSR policy, p. 14-15
Stakeholder engagement		
102-40	List of stakeholder groups engaged by the organisation.	Dialogue with stakeholders, p. 23
102-41	Percentage of employees subject to a collective labour agreement.	Human resources and society, p. 70
102-42	Principles for assessing and selecting stakeholders.	Dialogue with stakeholders, p. 23
102-43	Manner in which stakeholders are involved, including the frequency of this engagement by stakeholder type and group.	Dialogue with stakeholders, p. 23
102-44	Key topics and concerns raised in meetings with stakeholders and how the organisation has responded to these, including through its reporting.	Dialogue with stakeholders, p. 23

GRI 102: General disclosures 2016		Page reference
Reporting principles		
102-45	List of all companies included in the consolidated financial statements and not covered by this report.	About the Plukon Food Group, p. 6-7
102-46	Process for determining the content and specific scope of the report and the principles used therein.	CSR policy, p. 14-15
102-47	Material topics established during the process for determining the contents of the report.	CSR policy, p. 14-15
102-48	Impact of any restatement of information provided in a previous report and reasons for this restatement.	N/A
102-49	Significant changes from previous reporting periods with regard to definition and scope.	N/A
102-50	Period under review.	About this report, p. 74 1 Jan. 2017 to 31 Dec. 2018
102-51	Publication date of the most recent, previous report.	June 2017
102-52	Reporting cycle.	Biannual
102-53	Contact point for questions regarding the report or its content.	About this report, p. 74 info@plukon.nl
102-54	GRI application level.	About this report, p. 74
102-55	GRI table.	Appendix 3, p. 80-81
102-56	External verification.	Omission: no notes

Material topics

GRI Standard	Disclosure	Page reference
Financial performance		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	About the Plukon Food Group, p. 6-7, Forward Food Solutions, p. 8-9
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
GRI 201: Economic performance 2016	201-1 Organisation's revenue.	Priorities and goals, p. 18
		About the Plukon Food Group, p. 6-7
		Forward Food Solutions, p. 8-9
		Omission: a copy of the 2018 financial statements is available from the Chamber of Commerce.
Animal health		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Animal health, p. 50-55
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
GRI 4: Food Processing	FP 12: Percentage of antibiotic-free broilers within each concept (regular concept and concepts based on improved animal welfare) across all countries where Plukon operates.	Priorities and goals, p. 18
		Animal health, p. 50-55

Material topics

GRI Standard	Disclosure	Page reference
Animal welfare		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Animal welfare, p. 42-49
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
Own indicator	Number of slaughterhouses with an innovative container system (ATLAS) for improved and more efficient supply.	Priorities and goals, p. 18
Customer satisfaction		
GRI 103 Management Strategy 2016 (Omission: only qualitative evaluation of customer satisfaction during regular and personal interaction with customers. Plukon will be addressing this with a more consistent approach through a biannual customer evaluation).	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Food safety and transparency, p. 36-41
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
Own indicator	Conducting biannual stakeholder and customer analyses in 2019, 2021, 2023 and 2025.	Priorities and goals, p. 18
Food safety		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Food safety and transparency, p. 36-41
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
GRI 4: Food Processing	FP 5 Percentage of the production volume produced in production facilities which have been certified by a third party in accordance with internationally recognised standards and management systems for food safety.	Priorities and goals, p. 18
Developing innovative farming concepts		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Animal welfare, p. 42-49
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
GRI 4: Food Processing	FP 10 Percentage of total chickens slaughtered with improved animal welfare.	Priorities and goals, p. 18

GRI Standard	Disclosure	Page reference
Energy-efficiency		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Circular and efficient business operations, p. 56-65
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
302: Energy 2016	302-1 Energy consumption within the organisation	Circular and efficient business operations, p. 56-65
302: Energy 2016	302-3 Energy-intensity: Energy consumption per kg of live weight.	Circular and efficient business operations, p. 56-65
Own indicator	Number of transport movements for the transportation of broilers to production locations.	Circular and efficient business operations, p. 56-65
Development opportunities for employees		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Human resources and society, p. 66-69
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
GRI 404: Training and education 2016	404-2 Programmes for employees to promote talent development and opportunities for promotion, such as the Trainee programme.	Priorities and goals, p. 18 Human resources and society, p. 66-69
Safe working conditions		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Human resources and society, p. 72-73
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
403: Employee health 2018	403-9 a.iii. and b.iii. Number of work-related lost-time accidents involving company employees.	Priorities and goals, p. 18 Appendix 2. Employee data, p. 78-79
Social compliance		
GRI 103 Management Strategy 2016	103-1 Details on the materiality and scope of the topic.	Priorities and goals, p. 18
	103-2 Notes by the management on the topic and its various aspects.	Human resources and society, p. 71
	103-3 Evaluation by the management of the topic.	Priorities and goals, p. 18
Own indicator	Percentage of participation in Preventive Medical Examinations.	Priorities and goals, p. 18



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Acknowledgments

If you have any comments or questions,
please feel free to contact Plukon Food Group.

Industrieweg 36
NL-8091 AZ Wezep

Postbus 10
NL-8090 AA Wezep
The Netherlands

+ 31 (0)38-3766637
info@plukon.nl
www.plukon.com

