Creating together Neovia’s
FARM OF THE FUTURE
Neovia wants to position itself among the most innovative companies in the field of animal nutrition and health. As such, the company has invested in innovation for a number of years (state-of-the-art analysis laboratory opened in 2013, We’nov, its global innovation centre, opened in 2016, and investments in data analysis and connected objects). This constant investment in innovation must now be coupled with more technological experimentation based on tools (big data, digital technology) and new approaches (test modelling, analysis of animal behaviour, etc.). It must also be fully connected to new societal challenges in order to clearly place livestock farmers (connected farms, home automation) and consumers (children, adults) at the heart of our approach. To achieve these objectives, Neovia has set itself the new challenge of developing its Farm of the future.
Innovation to meet the challenge of feeding the world
The world’s population is expected to exceed nine billion by 2050. Feeding the world will be a major challenge and the major stakeholders in agriculture and the food industry will need to innovate to find new solutions and technologies to meet this challenge. Neovia’s aim is to develop a new way of livestock farming and build a prototype solution in the form of the Farm of the future project that works as a network with other connected farms worldwide.

Reinventing and improving livestock farming by innovating together!
Developing a new way of livestock farming is a collective and social project. As such, Neovia’s Farm of the future project, which is focused on technological and digital innovation, closely involves all stakeholders from the agriculture and food industries in its initiative and the innovation process. The Farm of the future will run in an assumed logic of open innovation and will aim to increase the number of research or industrial partnerships with its customers and suppliers. It will have the sole objective of offering innovative, efficient, and sustainable solutions to livestock farmers and consumers.

Bringing livestock farmers and consumers together to exchange and grow together!
The project also focuses on developing close relationships with final customers or consumers. Quality, traceability, and the need to focus on short distribution chains (direct purchases from livestock farmers, on-farm markets, etc.) are new concerns that need to be addressed. With this in mind, the Farm of the future will promote and encourage the creation of quality lines that guarantee both producers and consumers a high level of safety, traceability, and quality. It will also foster dialogue between farmers and consumers and stimulate the desire to work in this field for young people! As such, the network of farms of the future will have an educational and social role to explain the issues facing the farming community to consumers and to demonstrate that agriculture and livestock farming are exciting fields and are occupations of the future!

Succeeding in reconciling sustainability, job satisfaction, and economic performance together!
The planet has limited resources. Choosing between performance and sustainability is no longer possible today. The Farm of the future will aim to develop sustainable solutions and technologies to limit the impact of livestock on the environment (resource optimisation, precision feeding) and taking the notions of animal respect and welfare into account. This new approach to livestock farming involves a new way of doing R&D (increased modelling, big data, connectivity) marked by even more focus on understanding consumer expectations. This approach should help livestock farmers to better combine pride and job satisfaction, work-life balance, and economic performance!
GOAL

INNOVATE TOGETHER TO DEVELOP A NEW SUSTAINABLE WAY OF LIVESTOCK FARMING

Livestock farming that gives pride of place to farmers and capitalises on their expertise

Livestock farming that combines performance and responsibility

Livestock farming based on modelling and continuous innovation

Modernised and connected livestock farming that can interact with society and stakeholders
MISSIONS

Better combine livestock farmer work-life balance, consideration of social issues, consumer dietary balance, and assurance of quality for the final consumer.

- Structure, aggregate, and analyse data to ensure finely-tuned management of farms serving performance and quality.

- Integrate sustainable growth and the optimisation of resources at the heart of our strategy and solutions in conjunction with stakeholders.

- Develop our R&D to better anticipate changes in livestock farming and contribute to proposing more relevant and differentiating economic and technological models.

- Design the connected farm of the future in conjunction with stakeholders (concept of “technology showcase”, redesigned architecture, home automation opportunities, etc.).
THE PROJECT

A PROJECT FOR THE FUTURE
The Farm of the future project will be the hub of a French and international network (Brazil first and then Asia) of connected farms of the future. This network will include farms owned by Neovia (Neovia’s research centres around the world) as well as private partners or public farms. It will work closely with all of its stakeholders: universities, research institutes, customers, and suppliers.

In 2020, the Brazilian research centre, dedicated to research in pets but also active in the fields of aquaculture and ruminants, will become the first international centre to be connected to the world network of farms of the future.

A COLLABORATIVE PROJECT TO CO-DEVELOP THE FARM OF THE FUTURE WITH YOU
Neovia actively promotes open innovation. The company is already running a number of projects in conjunction with public or private partners (world innovation centre, corporate private equity fund “Neovia Venture”).

This proactive approach is based on the fact that companies that make a difference today no longer innovate alone. They multiply collaborative projects with external partners based on an open innovation approach.

Therefore, to go a step further today, Neovia wants to co-develop the Farm of the future with partners which are:

- **Technological**: start-up, consulting firms, technical solution providers, environmental and architectural experts, information systems specialists, etc.
- **Academic**: research institutes, colleges & universities, renowned researchers, etc.
- **Strategic**: customers, cooperative partners, suppliers, corporate investors, banks & financial investors, competitiveness clusters, etc.
FLEXIBLE ORGANISATION AND GOVERNANCE

In the project phase, the Farm of the future will rely on a project manager who will be in charge of managing and developing priority areas and launching the first initiatives within the framework of calls for projects. The project manager will gradually form a team and will be able to use internal resources available to all of Neovia’s seven business lines (marketing, IT, innovation, digital, R&D, formulation, design thinking, etc.). It may also work with external partners which will be actively participating in the Farm of the future project.

OPEN AND PARTICIPATORY GOVERNANCE

The governance of the Farm of the future will be based on partnerships. However, given the project’s importance, Neovia will have a central role in managing and coordinating it.

The governance of the Farm of the future will be truly open and will include various stakeholders with which it will determine the main strategic directions and priority projects.
KEY AREAS OF FOCUS OF THE FARM OF THE FUTURE

PRECISION AND SUSTAINABLE LIVESTOCK FARMING
Connected objects (sensors, connected collars, chips, etc.) collect a lot of data on livestock animals and their environment (buildings, etc.). One of the Farm of the future's objectives will be to collect and analyse these data to understand, in real time, the needs of each animal and use exactly the right amount of feed to feed them and improve their zootechnical performance. Precision feeding reduces the impact of livestock on the environment and guarantees the proper development of animals. This is combined with work on hygiene and dietetic nutrition.

FARMER JOB SATISFACTION AND REDESIGNED WORKING ENVIRONMENT
Improving the working conditions of livestock farmers is one of the Farm of the future's priority areas of focus. Improvements should result in renewed economic balance and a better work-life balance in general. It also involves redesigning the working environment (redesigned building architecture, home automation and connectivity, ergonomics).

BEHAVIOUR ANALYSIS & PREDICTIVE MANAGEMENT
Behavioural observation of animals (in particular through the use of connectivity tools) combined with statistical analyses and innovative data processing helps identify recurring trends and anticipate the occurrence of major risks. Neovia is looking to develop “predictive management” tools that will help farmers to better anticipate a variety of risks (health, weather, etc.) and minimise their impacts for a more efficient and clear management of livestock.

CO-INNOVATION
The farms of the future network is intended to foster interaction and enable its various contributors to constantly co-develop technological and scientific solutions to develop the farms of the future and our practices.
“E-FARMER” VOCATIONAL TRAINING
New technologies have profoundly changed our ways of working and will continue to impact the way our businesses develop. As such, Neovia wishes to support and foster training for farmers to help them better integrate new uses and practices in their development. Neovia wants to foster the emergence of a new type of farmer: “the e-farmer”. Neovia also wishes to accompany them in training (dedicated MOOCs, institutes, etc.) over the short and medium-term.

CONSUMER INTERACTION
Livestock farmers and consumers need to be regularly in contact with each other to help farmers better understand consumer expectations and give consumers a balanced view of the issues and problems they face. The Farm of the future will be used as a place of dialogue and “technology showcase” to foster exchanges and integrate social issues in practices (discussions with sociologists, school visits, etc.).
YOU HAVE SOLUTIONS?  
JOIN THE PROJECT!

Based on an open innovation approach, Neovia has chosen to work with the most innovative minds to co-develop the Farm of the future.

**WHO CAN PARTICIPATE?**
This call for solutions is open to businesses and start-ups as well as research groups and individuals who have solutions that are related to one of the three themes selected by the Farm of the future and/or concerning one of the following four target species: swine, poultry, ruminants, and pet care. One cross-cutting theme has also been identified (see opposite page).

**WHAT ARE THE THREE THEMES SELECTED?**

**PRECISION FARMING**
This area includes two concepts: precision farming and predictive management. Solutions for precision feeding exactly adapted to the needs of animals, mathematical modelling, and predictive management of livestock farms need to be identified. These solutions should help optimise monitoring animals in their environment, epidemiological surveillance, and early detection of pathologies. They should also improve sanitary conditions and performance on farms.

**EASY FARMING**
This theme combines the concepts of job satisfaction and vocational training. Solutions enabling livestock farmers to benefit from a better work-life balance and simplify the daily management of their farm need to be identified. Solutions to facilitate herd monitoring, improve animal welfare, and improve farmer working conditions (living environment, home automation solutions, ergonomics) also need to be identified.

**SUSTAINABLE FARMING**
This theme combines the concepts of precision livestock farming and sustainable livestock farming. Solutions to reduce the impact of farms on the environment (energy independence, reducing greenhouse gas emissions) and ensure better monitoring and better traceability of the quality of finished products (meat, milk, etc.) need to be identified.
HOW TO PARTICIPATE?

PROCESS
- Go to www.neovia-group.com/en/innovation/fof
- Download the application form
- Email your completed application form to farmofthefuture@neovia-group.com before 15 July

NEXT STAGES
Candidate shortlisting will only be based on application forms. Shortlisted candidates will be invited to present their solution in the form of a pitch to a panel composed of Neovia experts, renowned scientists, and qualified personalities from varied backgrounds at the We’nov World Innovation Centre.

KEY DATES
- 16 May 2017: call for solutions open
- 16 May - 15 July: submission of applications
- 15 July: call for solutions closed
- 15 July - 15 September: shortlisting
- From 15 September 2017: presentation to the panel and final selection of projects

WHY APPLY?
Shortlisted candidates will be able to present their project to a panel of Neovia experts, renowned scientists, and qualified personalities with whom they will be able discuss their project. Winners of the call for solutions will have high visibility and will have the opportunity to develop and present their solutions to Neovia’s customers, test them on a farm, co-develop them with Neovia, and equip the Farm of the future and its network of farms of the future with them.

CROSS-CUTTING THEME
It involves thinking of the Farm of the future at “showroom” dimension or, in other words, of asking oneself how best to organise the Farm of the future to encourage interactions with the public and consumers (tours, scenography, architectural ideas, home automation, activities, etc.).
FIND OUT MORE ABOUT
THE FARM OF THE FUTURE:

www.neovia-group.com/en/innovation/fof
farmofthefuture@neovia-group.com