

## Far-Reaching Vision and Ambition Being Brought to Life by Adisseo's New Sustainable Development Roadmap - INDUSTRY PERSPECTIVES

With the launch of a global Sustainable Development roadmap, Adisseo has set out its approach to address this key issue across its supply chain and beyond.

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Adisseo's vision is to feed the planet in a qualitative, affordable, safe and sustainable way, and its roadmap has two ambitions: the first is to establish Sustainable Development (SD) at the heart of its strategy in order to build a sustainable future for the group. The second is to align Adisseo's environmental footprint objectives with the COP21 Paris agreement.

In today's Industry Perspectives, we spoke to Frank Chmitelin, Executive Vice President Strategy, Sustainable Development and Safety, about Adisseo's approach to SD and the action it has taken so far. His colleague Guilherme Vasconcellos, Regional (Latin America) Category Manager Digestibility/Enzymes, shared with us the application of these sustainability priorities to provide a practical overview of this roadmap.

**[Feedinfo] Adisseo has recently released a new Sustainable Development (SD) report, which centres around a roadmap with four key priorities. Can you talk us through progress so far?**

**[Frank Chmitelin]** First, we aren't starting from scratch. In 2023, EcoVadis put Adisseo's SD policy and actions in the top 6% of companies rated in the manufacture of prepared animal feeds industry.

Then, the classical way to answer your question is to start with the environmental (E) pillar of ESG, then social (S), and then the governance (G) - but let me do the reverse and explain why.



**Frank Chmitelin**  
Executive Vice President Strategy, Sustainable Development and Safety  
**Adisseo**

Responsible corporate governance, ethics, and compliance are key cornerstones of Adisseo management. They are the essential foundations on which we are building our sustainable development strategy, which we want to be open to our stakeholders, through the establishment of our double materiality matrix and the richness of the information provided in our SD report.

This year we are moving one step further, preparing ourselves for the EU Corporate Sustainability Reporting Directive (EU CSRD) which will apply to Adisseo in 2025 (reporting in 2026) as well as for the upcoming Chinese ESG reporting standards.

The social dimension – our responsibility towards employees, stakeholders, and society – is also extremely important, starting with ensuring the safety of our operations across all entities, including occupational and process safety as well as a strict control of all emissions to ensure the protection of surrounding communities. Moreover, for our people, this means developing competencies and talents, increasing diversity, and providing good working conditions. We are also strongly focused on SD training, with about 80% of our commercial and technical support staff already having completed modules on sustainability and Life Cycle Assessment (LCA) fundamentals.

On the environmental pillar, we have two complementary objectives:

1. To reduce our direct environmental footprint: We are committed to achieving our 2025 emissions reduction targets for GHG (-20% on scope 1 and 2 vs 2020), energy (-12% vs 2020) and water usage (- 20% vs 2020).

We made good progress last year; our Nanjing plant signed a low carbon electricity supply contract for 100% of its needs (80% nuclear and 20% renewable), reduced CO<sub>2</sub> emissions by 805 tonnes, SO<sub>2</sub> emissions by 0.55t, and NO<sub>x</sub> emissions by 0.5t. The Nanjing plant is also optimising its wastewater treatment process and installed a steam turbine to improve energy efficiency.

In Europe, we have partnered in the DECLYC project in France to expedite decarbonisation efforts in Lyon Vallée de la Chimie. This has a targeted reduction of 80% of CO<sub>2</sub> emissions by 2050, equivalent to 1.6 million tonnes of CO<sub>2</sub> annually, aligning with national sustainability goals.

2. To contribute to reducing the environmental footprint of our value chain: This translates into integrating sustainability as a key pillar of our innovation process, adopting LCA methodology to evaluate our impact on the value chain and

developing metrics to index our products and share with customers.

**[Feedinfo] Life Cycle Assessment (LCA) is one of the key measurements you talk about in the Sustainable Development roadmap. How is Adisseo adopting this as a business and for customers?**

**[Frank Chmitelin]** We have regular requests from customers about the LCA of our product and the way to calculate their environmental impact from cradle to grave. Nevertheless, there is still no common way to do this; no clear standard nor certification system. In 2022, Adisseo joined the GFLI (Global Feed LCA Institute) in order to contribute to the elaboration of such a standard for the feed industry.

At Adisseo level, our LCA organisation, methodology and framework are defined. Our 15 main products, covering 75% of our business, have been assessed. This year, we will undertake more LCA assessments, and aim to cover 95% of our business.

Moreover, Adisseo is developing co-projects with customers and partners to demonstrate the value of our products and services to reduce their own scope 3 emissions. And for that, we are ensuring SD competencies in our sales and tech support teams to support sustainability projects with customers.

**[Feedinfo] There is a lot of talk about sustainability. How would you describe the concept and its importance to food production?**

**[Guilherme Vasconcellos]** By implementing sustainable methods, we are building the foundation for future generations' continuous prosperity and sustenance, as well as protecting the health and welfare of the current population.

**[Feedinfo] We are all aware of the increasing demand for food on a worldwide basis, and the limitations on resources. What are the key measures that the animal nutrition industry can adopt to ensure the sustainability of its operations?**

**Guilherme Vasconcellos**] Ensuring sustainability within the animal nutrition industry requires a multifaceted approach. Adisseo, for instance, has pursued several key measures across four principal pillars.

First, efficient resource management practices are essential, optimising feed formulations to maximise nutrient utilisation while minimising waste. Additionally, accessing the intrinsic value of natural nutrients and its variabilities can play a pivotal role in diet reformulation and, consequently, the need for natural resources - like corn, soybean meal, wheat, and oil.

Secondly, enhancing feed efficiency and conversion ratios stands as a linchpin strategy. By improving these metrics, we can produce more meat, milk, and eggs per animal with stable or fewer natural resources, mitigating pressure on the environment.

Thirdly, prioritising animal health and welfare is vital. We must develop efforts to bolster food safety standards, reduce mortality rates on farms, and minimise waste generation.

Lastly, addressing the excretion of high-impact nutrients such as phosphorus and nitrogen is imperative. These substances can contribute to water and soil imbalance.

**[Feedinfo] What role do additives play in promoting sustainability in animal production? Can you talk about an innovation which is now being used to reduce the environmental impact of animal production?**

**[Guilherme Vasconcellos]** Promoting a more balanced diet with correct amounts of available nutrients contributes to the sustainability of animal production by reducing reliance on resource-intensive animal products. Plant-based and plant by-product alternatives also offer lower environmental footprints in terms of land use, water consumption, and greenhouse gas emissions compared to animal-based foods.



**Guilherme Vasconcellos**  
Regional (Latin America) Category Manager  
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With better nutrition and digestion, animals achieve enhanced feed conversion ratios and reduced excreted nutrients. By optimising digestion, enzymes enable animals to utilise phosphorus and nitrogen more efficiently, minimising the amount of these nutrients lost in manure.

In a study conducted in Brazil and published in the European Symposium of Poultry Nutrition 2023 (ESPN), researchers assessed the effects of enzymes on the environmental and economic sustainability of poultry farming. Incorporating a comprehensive enzyme solution into the diet not only optimised feed conversion ratios but also reduced the carbon footprint of broilers by 6.5%.

This means that 1kg of broiler liveweight saved 137 grams in CO<sub>2</sub> equivalent. A farmer could save 4.795 tonnes of CO<sub>2</sub> if he raised 10 million broilers in a year. This is the same as 1,000 regular automobiles'-worth of emissions during that time, or the carbon sequestered by 80,000 trees over a ten-year period.

**[Feedinfo] How can companies such as Adisseo better assist farmers and partners to successfully adopt sustainable production, and what can we expect to see from you in future?**

**[Guilherme Vasconcellos]** Adisseo has been diligently investing in the development of practical and viable sustainability services.

One of our initial initiatives in this endeavour is the Sustainable Way Report for our customers. By leveraging basic customer data such as feed conversion ratio, feed consumption, animal weight, and diet formulation, our nutritionists can deliver comprehensive reports detailing the impact of any nutritional intervention aimed at reducing carbon footprint.

The primary application involves assessing the efficacy of a singular additive within the system to determine its effectiveness in reducing emissions, such as organic selenium sources. However, various scenarios may also be evaluated, considering factors like ingredient variability or the incorporation of new raw materials.

Depending on the nutrient content of feed ingredients or the availability of raw materials in specific regions and seasons, nutritionists may need to reformulate diets to adjust nutritional levels. This reformulation may result in an increased or decreased inclusion of raw materials, potentially altering the diet's carbon footprint. With our Sustainable Way Report, customers can have access to different carbon footprints scenarios and adjust diet formulation according to those impacts.

**[Feedinfo] Looking ahead, what new developments we will see from Adisseo? And how do you expect livestock production to change, and potentially benefit, from the focus on sustainability?**

**[Frank Chmitelin]** We are about to launch a tool to integrate environmental data into formulation. This tool introduces a new possibility for nutrition, bringing lower costs, higher profits, and more sustainable diets.

The future holds immense potential, with numerous possibilities and ideas for new services emerging daily. In Europe we have started to see the emergence of new policies which give farmers the possibility of generating carbon credits, creating a new source of income for animal production systems. Carbon credits have a market, and animal production has the potential to be a significant generator of these credits. We believe that helping animal production is part of the solution for a better planet.

For more information on our commitments, LCAs, supply chains, and sustainability reports, visit <https://www.adisseo.com/en/the-adisseo-way-sustainability/>.

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