

GLOBAL FOOD SECURITY

ADM Aims to Improve Global Food Security and Mitigate Environmental Impacts

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Climate change is of utmost priority to business and the end-consumer. Globally, consumers are demanding a higher standard from companies regarding their environmental practices and are using their purchasing power to reinforce these values and beliefs. Research finds 49 percent of global consumers claim they have made changes to their diets, and 40 percent have chosen one product over another, in order to be more environmentally responsible.

As a leader in human and animal nutrition, ADM is committed to playing our part within the global food system to serve the world's nutritional needs while reducing environmental impacts. Extensive opportunity – and responsibility – exists within the agriculture sector to develop scalable nutrition solutions that contribute to a more sustainable food future, including efforts to improve livestock productivity, crop yields and manure management, and at the same time, reduce greenhouse gas (GHG) emissions.

Identifying Areas for Improvement

Within the livestock sector, the two main emission sources are the production and processing of feed, and enteric fermentations. Life Cycle Assessment (LCA) methodology is a tool to help quantify the environmental impact of two key phases of feed and additives: their manufacturing and their use by livestock. The results of the first part of LCA can provide brands the important supply chain data they need, from sourcing to delivery, to include critical carbon footprint information on their product labels. For a global supplier like ADM, LCA helps us identify the key areas



for operational improvement so we can implement actions that will have an effect to our downstream customers.

The second phase LCA assesses whether using the feed product can support a reduction in environmental impact across the entire value chain. This includes lowering greenhouse gas emissions through the improvement and promotion of animal health, the optimisation of animal performance, and/or the reduction of nutrient excretion in manure. The second-phase results obtained help companies demonstrate how their products and solutions can contribute to reducing the greenhouse gas emissions of their sector.

ADM recently obtained the first verified LCA results of our feed additive, XTRACT code 6930. XTRACT is registered in more than 65 countries and is an innovative combination of microencapsulated active substances found in aromatic plants and spices with demonstrated physiological effects

Strive 35 Environmental Goals

KEY TOPIC	GOAL	PROGRESS	TARGET DATE	SDG/SASB ALIGNMENT
 Emissions	25% absolute reduction in Scope 1 + 2 GHG emissions over 2019 baseline by 2035	In progress 8.0% reduction 5-year Target 15-year Target	12/31/2035	 Greenhouse Gas Emissions
	25% reduction in Scope 3 GHG emissions over 2019 baseline by 2035	In progress 0% reduction 5-year Target 15-year Target	12/31/2035	
 Energy	15% reduction in energy intensity over 2019 baseline by 2035	In progress 0% reduction 5-year Target 15-year Target	12/31/2035	 Energy Management
 Water	10% reduction in water intensity over 2019 baseline by 2035	In progress 0% reduction 5-year Target 15-year Target	12/31/2035	 Water Management
 Waste	90% diverted waste from landfill by 2035	In progress 83.8% diverted 5-year Target 15-year Target	12/31/2035	

on livestock. Performance analyses of XTRACT for poultry broilers demonstrates its efficacy in increasing carcass yield, weight and breast weight, as well as improved feed conversion ratio³. XTRACT 6930 is one of the first products in the plant extract-based feed additives segment to have its environmental impact externally verified. Additional LCA in progress will assess ADM's environmental impact of feed manufacturing and application on animal production.

ADM is additionally conducting extensive research to develop strategies that mitigate methane production by ruminants. Reducing the amount of methane released can lead to more energy being made available for animal performance, including higher milk production, fat and milk protein in dairy cows, or higher weight gain in beef cattle. Our preliminary phase of *in vitro* trials has highlighted the potential of various strategies, including the use of plant extract-based additives. Several *in vivo* studies are now being conducted to quantify the level of methane reduction, depending on management practices.

Fostering Sustainability and Food Security

Today's conscientious consumers are acutely focused on earth-friendly food production, as well as evidence of environmental rebuilding and restoration. Transparency throughout the supply chain helps build consumer trust in food brands and the agriculture sector. Notably, 42 percent of global consumers have become more trusting of environmental claims made by products and brands in the last two years. Companies can continue to build this trust by announcing key milestones and their progress towards sustainability goals.

ADM's Strive 35 sustainability goals are an ambitious plan to reduce absolute GHG emissions by 25%, energy intensity by 15% and water intensity by 10%, and achieve a 90% landfill diversion rate by 2035 against a 2019 baseline. We're also committed to be hundred percent deforestation-free by 2025, which includes direct and indirect sourcing of all commodities. Furthermore, we have committed to working with the Science-based Targets Initiative with the aim of obtaining approval of our climate targets and



ADM's role in the value chain

alignment with global goals to limit rising temperatures to 1.5°C.

Food security is another key element to the sustainability story, ensuring products remain affordable and accessible to consumers across the globe. By 2030, the global population is expected to reach 8.5 billion, which is up from 7.8 billion in 2020, according to data from the United Nations. Assuming this growth rate continues, current United Nations projections indicate that more food will need to be produced in the next 40 years than in the past 8,000 years to feed the world. Zero hunger is one of the United Nations Development Programme's 17 Sustainable Development Goals. Now, more than ever, sustainability and food security efforts are vital to the well-being of our world.

This work is at the core of ADM's purpose as a company. Our

focus is unwavering on programs that help maintain continuity across the food and agriculture value chain and ensure people around the world are being fed. For example, we're collaborating with academic research partners and peers across the value chain through our participation in multi-stakeholder forums such as the Responsible Meat Initiative (ReMI) and the Greener Cattle Initiative. We're also supporting regenerative agriculture practices that can improve soil health and biodiversity and investing in solutions for more eco-conscious production of animal feed, livestock and aquaculture. Our collaborative efforts across both human and animal nutrition are supporting a more sustainable food system with the capacity to feed the world.