

Yara International and ATOME sign a 10-year offtake agreement for low-carbon fertilizer production in Paraguay

15 September 2025 | News

ATOME to supply 260,000 tons per year of low-carbon fertilizer, powered entirely by renewable energy, from its Villeta Project



ATOME to supply 260,000 tons per year of low-carbon fertilizer, powered entirely by renewable energy, from its Villeta Project

ATOME, a leading low-carbon fertilizer developer and the UK's only international industrial-scale low-carbon fertilizer company, has announced the signing of a definitive 10-year offtake agreement with Yara International ASA. The offtake agreement between ATOME and Yara represents a significant step forward in the global transition to sustainable agriculture.

Under this agreement, ATOME will supply and Yara will purchase the entire production of 260,000 tons per year (tpy) of low-carbon fertilizer from ATOME's Villeta Project in Paraguay. The fertilizer will be produced using 100% renewable power.

Yara and ATOME will collaborate to maximize the market potential and premium value of ATOME's low-carbon fertilizer. This partnership leverages Yara's extensive sales, marketing, and distribution network, coupled with its expertise in relevant markets, to position ATOME's product as a leading solution for decarbonizing agricultural supply chains.

By producing low-carbon fertilizer at an industrial scale and powered entirely by renewable energy, ATOME is addressing critical environmental challenges while meeting the growing demand for sustainable food production solutions. With its strategic location in Mercosur and the backing of Yara's extensive distribution network, the Villeta Project is set to play a pivotal role in decarbonizing the food sector and advancing regional climate and food security goals.

Market Demand for Low-Carbon Fertilizers: The Villeta Project is set to produce low-carbon Calcium Ammonium Nitrate (CAN) fertilizer, manufactured from green ammonia derived from 100% renewable baseload hydropower. This production process eliminates reliance on subsidies or grants and is strategically located near major demand centers. Positioned in the heart of Mercosur, the world's largest fertilizer import market, Villeta is poised to disrupt the heavy reliance on imported, fossil-fuel-based fertilizers in the region.

The Mercosur region, encompassing major food-exporting nations like Argentina and Brazil, currently depends significantly on fossil-fuel-based fertilizers, much of which is imported from Russia and China. ATOME's low-carbon fertilizer offers a sustainable alternative, addressing both regional climate goals and food security challenges.

Environmental Impact and Decarbonization Goals: According to United Nations data, approximately one-third of human-caused greenhouse gas (GHG) emissions are linked to food production. Fertilizer production and use account for more emissions than the shipping and aviation industries combined. ATOME's low-carbon Calcium Ammonium Nitrate product aims to decarbonize the food sector by targeting emissions at the root of the food value chain. Unlike conventional nitrogen fertilizers like urea, which have a significant carbon footprint, ATOME's product is both environmentally friendly and promotes high crop yields. This makes it an essential tool for global food producers seeking cost-effective solutions to reduce emissions in their supply chains.

Yara's Role in Advancing Low-Carbon Fertilizers: As a first mover in marketing low-carbon fertilizer alternatives, Yara has been actively selling such products directly into the agricultural supply chains of the world's largest food and beverage companies. The offtake agreement with ATOME will enable Yara to expand its portfolio of low-carbon products, strengthening its position in the market for sustainable agricultural solutions.

Chrystel Monthean, EVP Americas at Yara, emphasized the company's commitment to a "nature-positive food future." She noted that Yara's collaboration with farmers, cooperatives, and distributors in South America aligns with the goal of responding competitively to market demand for renewable energy-based fertilizers.

Next Steps to Final Investment Decision (FID) The signing of this definitive offtake agreement marks the final commercial milestone in ATOME's journey to reaching a final investment decision (FID). This achievement follows the successful completion of other critical commercial milestones, including the signing of a US\$465 million fixed-price, lump-sum Engineering, Procurement, and Construction (EPC) contract with Casale.

Terje Bakken, Director for Ammonia and Fertilizer Markets at ATOME, expressed enthusiasm about the partnership, stating, "ATOME is pleased to sign this definitive and final offtake agreement with Yara. We know that making the switch to low-carbon fertilizer is one of the most effective ways to reduce food production emissions. The agreement with Yara is an important validation of our commercial model, underpinned by the market case for the world's biggest food and beverage producers to urgently address agricultural emissions in their supply chains."

Bakken also highlighted the strong and mutually beneficial relationship between ATOME and Yara, expressing gratitude for the trust and collaboration of the Yara team. Chrystel Monthean of Yara echoed these sentiments, emphasizing the company's ambition to contribute to a sustainable food future. She noted that the local supply of fertilizers based on renewable energy would enhance Yara's ability to meet market demand while leveraging its agronomic expertise.