

10th April 2025

Tsubame BHB Co., Ltd.

Tsubame BHB signs LOI with Brazilian Company on Green Ammonia Manufacturing Facilities Project – Accelerating toward the first unit ordered overseas –

Tsubame BHB Co., Ltd. (“Tsubame BHB”), which is aiming for the social implementation and commercialization of distributed ammonia manufacturing plants, has signed a Letter of Intent (LOI) with ATVOS AGROINDUSTRIAL PARTICIPAÇÕES S.A in Brazil (“Atvos”), one of the leading biofuels companies in Brazil regarding a green aqueous ammonia factory in Mineiros (GO), where Atvos’s Morro Vermelho Unit (UMV) is located, responsible for ethanol production.

The new plant will have an installed capacity of 20,000 tons of the product. It will be used to replace fossil-based fertilizers applied to agricultural areas at both UMV and the Alto Taquari Unit (UAT), located in the homonymous municipality in Mato Grosso. With this solution, Atvos estimates it will avoid the emission of approximately 11 thousand tons of CO₂ per year, significantly reducing its carbon footprint.



The execution of this LOI was witnessed by Japanese Prime Minister Shigeru Ishiba and President Luiz Inácio Lula da Silva of Brazil, at the Japan-Brazil Economic Forum held in Tokyo on March 26, 2025. On 28th March, Mr. Caio Dafico, Investment and Business Development VP at Atvos, visited Tsubame BHB for a tour of the pilot plant, and to conduct discussions on future directions for the project.

Tsubame BHB will further accelerate its efforts to secure this first order for an overseas unit, and to rapidly promote overseas deployment.

Comment from Atvos CEO Bruno Serapião

As one of the largest biofuels producers in Brazil with the purpose to lead the energy transition to move the world and transform lives, Atvos seeks to contribute to the decarbonization of the globe's leading economies while also reducing the carbon footprint of its own operations. Thus, the partnership with Tsubame to produce green ammonia represents a significant step toward achieving this goal, as it will enable us to reduce the use of fossil-based nitrogen fertilizers and further strengthen our commitment to fostering the social and economic development of the countryside cities where we are located through job and income generation.

Comment from Tsubame BHB CEO Koji Nakamura

Brazil has great potential to become a major producer of green hydrogen, by leveraging its abundant renewable energy resources, and it is also a major agricultural nation that consumes nitrogen-based fertilizers in high volumes. As such, I believe that it is one of the countries that can manufacture green ammonia as a fertilizer at the small distributed ammonia synthesis plants offered by Tsubame BHB. I consider it a great honor to be able to collaborate with a major Brazilian bioethanol manufacturing company like Atvos, and I hope that through this collaboration, we can contribute to the decarbonization of agriculture in Brazil.

About Atvos

Atvos is one of Brazil's leading biofuel companies and produces Sugarcane Ethanol, Very High Polarity (VHP) sugar, plus sustainable electricity using sugarcane biomass. From this raw material, the company has the capacity to produce around 3.3 billion liters of ethanol, which can power 60 million compact cars, plus 750,000 tones of VHP sugar, and cogenerate approximately 4,200 GWh of electricity from biomass - enough to supply a population of more than 20 million people. Atvos has around 11,000 employees in the states of Goiás, Mato Grosso, Mato Grosso do Sul and São Paulo, democratizing economic development in the countryside of Brazil where its eight agro-industrial units are located.

As a major player in the generation of clean and renewable energy, the company is one of the main national issuers of Decarbonization Credits (CBIOS), having renewed the RenovaBio certification of all its agro-industrial operations. Through Social Energy, another Atvos program, it supports projects focused on issues including education, culture, health, safety, the environment, and production activities. The initiative aims to foster socio-economic development and improve the quality of life in communities where the company operates. For more information, please visit <https://atvos.com/>.

About Tsubame BHB (<https://tsubame-bhb.co.jp/>)

Tsubame BHB is a deep tech company with a Vision of "Leveraging original technologies to resolve

critical issues faced by humans in relation to food and the environment, and achieving a sustainable society.” Its goal is to contribute to the on-site production of ammonia at distributed plants, using technologies that synthesize ammonia at low pressures and low temperatures. Established in 2017, the Company uses electrified catalyst technologies developed by Professor Emeritus Hosono from the Institute of Science Tokyo (formerly the Tokyo Institute of Technology). It currently focuses its efforts on the overseas deployment of these technologies, mainly in North and South America, Australia, and Africa.

Company overview

Name: Tsubame BHB Co., Ltd.

Representative Director and CEO: Koji Nakamura

URL: <https://tsubame-bhb.co.jp/>

Head office: 2-3-12 Shin-Yokohama, Kohoku-ku, Yokohama, Kanagawa Pref.

Shin-Yokohama Square Building, 6F

Established: April 2017

Outline of business:

- R&D, sales, and facilities maintenance related to on-site ammonia supply systems
- R&D, manufacturing, and sales involving synthetic ammonia catalysts
- Manufacturing and sales of ammonia and ammonia-related products

Media Contact

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