## ~Launched Initiatives to Reduce Greenhouse Gas Emissions in Dairy Industry in March 2023~ Ajinomoto Co., Inc. and the Meiji Group, started collaboration to realize sustainable dairy farming

The first case in Japan implementing J-Credit-based project using amino acid for dairy farming

Ajinomoto Co., Inc. ("Ajinomoto Co.") began collaborating with Meiji Co., Ltd. (" Meiji Co.") and other Meiji Group companies to build a business model for the dairy industries that utilizes J-Credit Scheme \*2 to simultaneously reduce greenhouse gas (GHG \*1) emissions and create economic value.

The project for J-Credit Scheme that utilizes amino acids in dairy farming is the first case in Japan (according to our survey). %1) Abbreviation of Greenhouse Gas

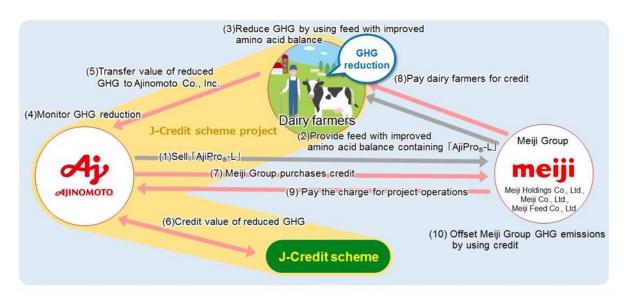
%2) A scheme in which the Japanese national government certifies CO<sub>2</sub> and other GHG emissions reductions and removals as "credits" that can be bought and sold.

Recently, as the demand for protein increases due to the worldwide population increase, the environmental impact associated with the production of raw milk and the breeding of beef cattle is increasingly gathering interest. GHG emissions originating from dairy farms, such as methane (CH4) from beef's burp, and nitrogen dioxide (N2O) generated from manure, account for about 3% of global warming, and the necessity of dairy farmers and manufacturers to respond to these emissions is urgent. Furthermore, due to the recent cost increase in feed prices, the business for dairy farmers is seriously affected, making it a critical issue to reduce cost increase while reducing the GHG emission.

3) Source: "Sustainable Dairy-Contributing to SDGs" (Author: Junko Kimura, Choji Nakamura Planning and Editorial: J-Milk 2022)

Under such circumstances, Ajinomoto Co. will build a business model that utilizes J-Credit Scheme through collaboration with the Meiji Group. In this business model, Ajinomoto Co.'s *AjiPro*<sub>®</sub>-*L*, amino acid lysine formulation for dairy cows, is used to reduce GHG emissions. Through Ajinomoto Co.'s proprietary manufacturing technology, this product effectively delivers amino acids into the body (digestive system) of cows that are normally difficult to reach, to cover as far as the small intestine. Soybean meal, which is generally used as a feed, is high in protein, but it is also high in cost and contains excessive amino acids. Use of *AjiPro*<sub>®</sub>-*L* allows for the reduction of the consumption of feed such as soybean meal and supplement the balance of amino acid effectively. As a result, feed cost will be reduced while maintaining milk production, and reducing excess nitrogen generated from manure leading into reduction of N2O.

[A business model utilizing J-Credit Scheme that simultaneously reduces GHG emissions and creates economic value]



In order to utilize J-Credit Scheme, Ajinomoto Co. applied to J-Credit Certification Committee for its registration in the "Project for Feeding Amino Acid-Balanced Feed to Dairy Cattle," which was approved on March 15. From then onward, Ajinomoto Co. will be committed to project operations such as monitoring of GHG emissions and crediting activities.

This project will be launched at a farm in Hokkaido in partnership with the Meiji Group. Under this business model, the Meiji Group purchases the credits acquired by Ajinomoto Co., and the payment will be made to dairy farmers to become a new source of income for the dairy farmers in the future. In addition, credits purchased by the Meiji Group can be used to offset GHG emissions of the Meiji Group, thereby contributing to reducing GHG throughout the dairy industry.

In the future, Ajinomoto Co. plans to expand the participation of dairy farmers that are affiliated with the Meiji Group. In addition, Ajinomoto Co. will seek to further reduce GHG, for example, by applying the saved cost to cover for the expense necessary to purchase CH4 reduction additives by the farmers, thereby relieving the farmers from additional financial burden. Further plans to be expanding this scheme is under consideration by Ajinomoto Co. not only for dairy cows, but also for beef cattle, as well as business prospects in the overseas market.

Through this collaboration with the Meiji Group, Ajinomoto Co. aims to achieve the sustainability of food resources and the sustainability of the dairy industry that the Meiji Group is aiming for, while simultaneously reducing the global environmental burden and creating economic value.

## Reference

■ Overview of Meiji Co., Ltd.

(1) Company name: Meiji Co., Ltd.

(2) Location: Chuo-ku, Tokyo(3) Established: December 1917

(4) Representative: Katsunari Matsuda, President

(5) Business line: Manufacture and sale of milk and dairy products, confectionery, foods, etc.

(6) Number of employees (consolidated): 10,464 (Year ended March 31, 2022)

(7) Website: https://www.meiji.com/global/(Link)

Meiji Co., Ltd. press release on this matter

As of March 27, 2023

The Meiji Group and Ajinomoto Co., Inc. started a collaboration to realize sustainable dairy farming / (Link)

## ■About AjiPro®-L

Ajinomoto Co. has been selling *AjiPro®-L* since 2011. Lysine, one of the essential amino acids in the rumen of cattle, is usually broken down and was difficult to be used as a nutrition. *AjiPro®-L*, with Ajinomoto Co.'s proprietary manufacturing technology, enables the efficient delivery of lysine to the small intestine to be absorbed as (functional)nutrition. The product, offering improved dairy productivity and improved feed efficiency supported by solid scientific knowledge, holds top market share (Ajinomoto Co. survey) of the lysine formulation for dairy cows and is used worldwide.





AjiPro<sub>®</sub>-L Introduction: <a href="https://www.ajihealthandnutrition.com/solutions/ajipro-l-2/">https://www.ajihealthandnutrition.com/solutions/ajipro-l-2/</a>

