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Meiji Holdings Co., Ltd.

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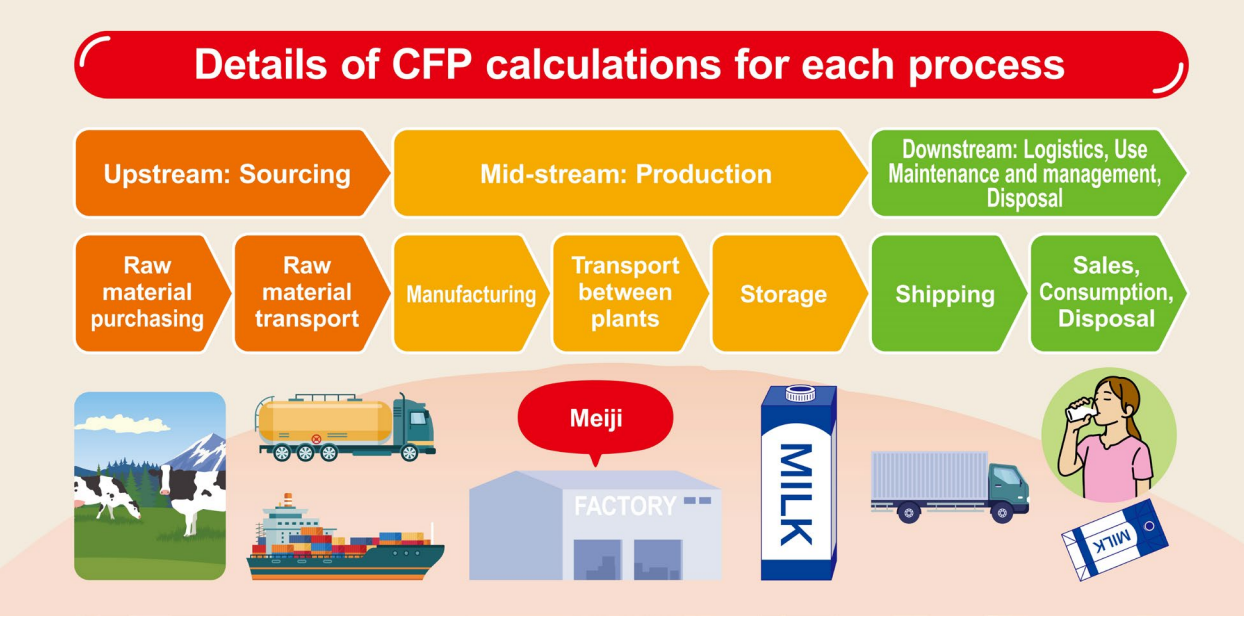
Immediate Release

Efforts to Contribute to Sustainable Dairy Farming #1
Identifying factors with a high reduction effect for reducing GHG emissions

Started to Calculate the Carbon Footprint of Milk Production, the First Effort in Japan

Results showed that milk raw material purchasing and transport processes account for 91% of GHG emissions

Meiji Co., Ltd. (President and Representative Director: Katsunari Matsuda) has considered and begun carbon footprint of Products (CFP) calculations for its milk products using field data from dairy farmers. This is the first efforts in Japan to calculate CFP related to milk production.*1 Results showed that upstream processes, raw material purchasing and transport, account for 91%*2 of total greenhouse gas (GHG)*3 emissions.



CFP is the sum of GHG emissions produced throughout each process of the lifecycle of a product or service, from creation to disposal, and then converting to the CO_2 equivalent. Quantitatively calculating the environmental impact of products and services and visualizing those emissions throughout the supply chain makes it easier to identify factors with a high reduction effect.

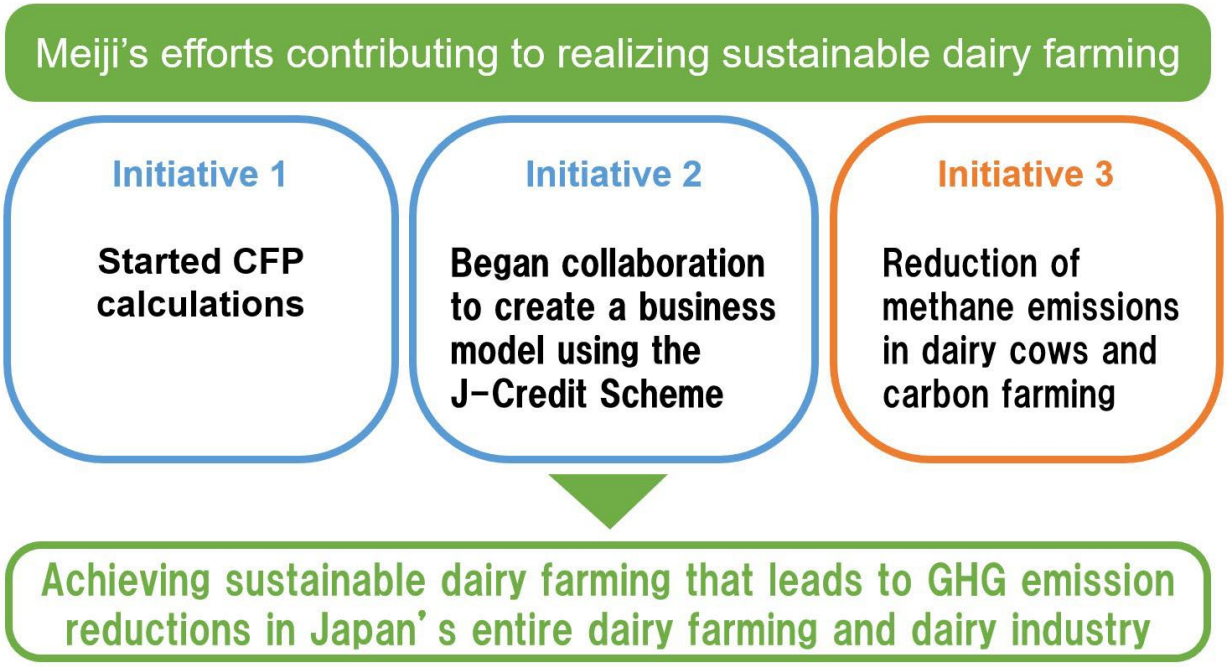
Meiji is the first company in Japan to collect field data from dairy farmers, examine a calculation formula, and calculate CFP for commercially available products based on international standards. The key points of this initiative are as follows:

- A calculation method that references guidelines of international organizations
- Calculated based on field data from dairy farmers
- An unprecedented initiative by a dairy manufacturer in Japan

We referenced EPD*[4], international standards, and global standards established by the International Dairy Federation (IDF) instead of setting internal standards for calculations. While some companies calculate by making estimates based on industry averages and other database figures (secondary data), it is preferable to calculate CFP using actual figures (primary data) derived from the company's supply chain. Collecting emissions data at our plants and calculating CFP are quite difficult and the workload was heavy because we had no experience. In addition, gathering actual figures for raw material sourcing is more difficult and needs a lot of effort. We should work to share information with suppliers and are required additional labor and know-how when we collect information.

Due to the cooperation of dairy farmers, we successfully gather data for *Meiji Organic Milk* and calculate its CFP. Results showed that **upstream processes related to raw material purchasing and transport account for 91% of total GHG**. This result is similar to the GHG emissions in milk shown globally. We believe that the Japanese dairy farmers and the dairy industry have realized that reducing GHG emissions is a significant and worthwhile initiative after we calculate with actual data from dairy farmers.
As a dairy manufacturer, we will challenge ourselves to reduce GHG emissions in the dairy industry. We will further strengthen our efforts throughout the milk supply chain by working together with various partners in different fields of expertise.

In addition to GHG calculations, we started collaborating to create a business model using the J-Credit Scheme.*[5] The business model is to achieve both GHG emission reductions related to dairy farming and the dairy industry and economic value creation. We will unite with dairy farmers on various perspectives toward reducing GHG emissions. Our efforts will include reducing methane emissions in dairy cows, a major issue related to dairy farming, and carbon farming*[6] focused on soil utilization.
These efforts will promote reducing GHG emissions in the Japanese dairy industry and boost realizing sustainable dairy farming. We should constantly supply milk and dairy products throughout the milk supply chain.



Meiji Group GHG reduction goals (compared to 2019)

The Meiji Group aims to achieve carbon neutrality by 2050.

Scope 1, Scope 2 (in-house emissions): 50% reduction by 2030, net zero by 2050

Scope 3 (Indirect emissions outside the company such as production, sourcing and transport of raw materials, and transportation and disposal of products): 30% reduction by 2030, net zero by 2050

See Meiji Holdings sustainability information for details.

https://www.meiji.com/global/sustainability/caring-for-the-earth/climate-change.html#position-on-climate-change

*1 First in Japan to calculate CFP based on actual data from dairy farmers while also referencing global CFP standards for the dairy sector. This global standard was prepared as a joint statement by the International Dairy Federation (IDF), an international dairy industry association, and the Global Dairy Platform (GDP).

*2 Figures calculated for *Meiji Organic Milk*

*3 Greenhouse Gas (GHG): An atmospheric gas with heat (infrared)-absorbing characteristics. Increases in GHG causes surface temperatures to rise, making GHG a main cause of global warming and the resulting extreme weather. The main GHG increasing as a result of human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O) and CFCs. The magnitude of the greenhouse effect varies depending on the gas. For example, CH_4 is said to have a greenhouse effect 25 times that of CO_2, and N_2O about 300 times that of CO_2 (Reference: Ministry of the Environment website).

*4 EPD (Environmental Product Declaration): A Type III environmental declaration that discloses product environmental information based on life cycle assessments (LCA)

*5 J-Credit Scheme: A scheme through which the government certifies as credits the amount of CO_2 emissions reduced through the adoption of energy-saving equipment, the use of renewable energy, and the amount of CO_2 absorbed through appropriate forest management. This scheme integrates the domestic credit scheme and the offset credit scheme in a developmental manner, and is operated by the government. Credits generated through the J-Credit Scheme can be used for various purposes, including achieving the goals outlined in the Keidanren Carbon Neutral Action Plan as well as for carbon offsetting (Reference: J-Credit Scheme website).

*6 Carbon Farming: A farming method that aims to reduce GHG emissions by capturing atmospheric CO_2 in farmland soil to improve soil quality. This is also referred to as regenerative agriculture. (Reference: Ministry of Agriculture, Forestry and Fisheries website)

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