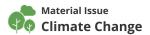
## **Environmentally Responsible Production**



#### Governance

The Fuji Oil Group's Sustainability Committee\*1 is an advisory body to the Board of Directors that is chaired by the President and CEO. It deliberates on and monitors the material ESG issue\*2 of Climate Change from a multi-stakeholder perspective, and reports the results to the Board. The Chief Technology Officer (CTO) oversees the progress of initiatives for Environmentally Responsible Production, a priority action within this material issue.

\*1 Governance, Strategy, Metrics and Targets, Risk Management > Governance https://www.fujioilholdings.com/en/sustainability/sustainability\_management/

\*2 Governance, Strategy, Metrics and Targets, Risk Management > Strategy, metrics and targets https://www.fujioilholdings.com/en/sustainability/sustainability\_management/

## Strategy

Our Group is aiming to reduce the environmental impact of diverse processes in our product supply chain. Our particularly significant challenges as a food company are the utilization of the  $CO_2$  emitted in raw material cultivation processes and reduction of  $CO_2$  emissions in product manufacturing processes. We also believe it is vital to evaluate and effectively reduce the environmental impact not only in raw material procurement and our own manufacturing processes, but throughout the entire product supply chain including at the stage at which customers process our products.

Failure to address these issues will increase risk in all areas, including in raw material procurement, logistics and manufacturing, as well as resulting in biodiversity loss caused by climate change-driven extreme weather. Conversely, responding to these issues will become an opportunity to achieve sustainable raw material supply through environmental conservation, reduce costs by streamlining production processes, and cultivate trust among stakeholders.

Starting from our own manufacturing processes, we will work to develop processing technologies with a low environmental impact and help us achieve our reduction targets of CO<sub>2</sub> emissions, water usage, and waste outlined in our Environmental Vision 2030.\* We also conduct assessments of all our business activities from a wider point of view, such as on the environmental conservation during the production process of raw materials and aim to reduce environmental impacts throughout the entire product lifecycle by leveraging technological innovation.

\* https://www.fujioilholdings.com/en/sustainability/environmental\_management/

#### Risk management

Environmental Management > Risk management https://www.fujioilholdings.com/en/sustainability/environmental\_management/

## **Metrics and targets**

 $\bigcirc$  At least 90% complete  $\triangle$  At least 60% complete X Less than 60% complete

FY2023 Goals	FY2023 Results	Self-assessment
Establish test cultivation conditions and collect the data required for selecting soybean varieties, with the aim of building an indoor soybean farm that effectively utilizes CO <sub>2</sub> emissions	Investigated favorable cultivation temperature, density, and other environmental conditions for increased yield per unit area. Obtained necessary data for variety selection, such as growth potential and number of flowers	0
Study the reduction in environmental impact (CO <sub>2</sub> emissions reduction) achieved by streamlining the production process using new oils and fats from new plant breeds developed by breeding technology	Used laboratory-scale testing to confirm that new oils and fats help reduce $CO_2$ emissions by 17% over existing raw materials	0

## **Analysis**

Establishing successful soybean indoor farming requires higher productivity compared to outdoor production. By actually growing several varieties of soybeans and collecting data on the way  $CO_2$  fertilization\* and cultivation conditions impact growth, we were able to collect the data necessary to select varieties favorable for indoor farming. Moving forward, we will select the optimal soybean varieties and also investigate productivity at appropriate cultivation scales.

In terms of the practical application of new oils and fats created through breeding technology, we conducted laboratory-scale production testing using seeds obtained from experimental cultivation to obtain a highly accurate estimate of reduced CO<sub>2</sub> emissions.

\* CO<sub>2</sub> fertilization: A technology that artificially increases carbon dioxide density inside cultivation sites to promote photosynthesis and increase crop yield. It is a form of carbon dioxide capture and utilization (CCU).

### **Next steps**

We aim to reduce our environmental impact by utilizing  $CO_2$  emissions. Our present challenge is to improve soybean and edamame productivity for commercialization. To address this issue, we set the following goals for FY2024.

- Select suitable soybean and edamame varieties suitable for increasing yields with CO<sub>2</sub> fertilization
- Investigate cultivation conditions at medium-scale facilities

## **Specific initiatives**

# Research project on soybean cultivation in Japan utilizing carbon emissions from a waste incineration facility

Developing technology that helps address shortages in food resources caused by climate change and population growth is an important issue for our Group. To counter the recent price increases in food and energy resources, and from the standpoint of food security, we believe that providing delicious, healthy and sustainable foods that use domestic crops is indispensable.

To that end, in May 2022, we launched a joint research project with Saga City, Saga University, and ITOCHU ENEX Co., Ltd. to capture and utilize CO<sub>2</sub> in the production of soybeans in Japan. In order to produce soybeans at indoor farms, we are currently selecting the most suitable varieties and cultivation conditions to increase harvests. Moving forward, we will collect data as we sequentially increase our scale of cultivation with the aim of creating successful indoor farms. In the future, we will use our Group's technology to commercialize the domestic soybeans grown through this cultivation system as sustainable soy products for our customers.



CCU facility at the waste incineration facility in Saga City



Soybeans in a cultivation test using CO<sub>2</sub> fertilization