

## Recognizing and responding to climate-related risks and opportunities

### ■ Conducting TCFD-recommended scenario analysis

We participate in the Japan Climate Initiative, exchanging ideas and information with other companies, local governments, NGOs and NPOs to gain a better understanding of the rapidly changing situation around climate change, and to support activities and industry organizations working to prevent it. We also participate in the Japan Dairy Industry Association and support their climate change targets.

As part of our disclosure related to climate change, we calculated our Scope 3 emissions in Japan for fiscal 2021 and arrived at a total of 324,452 tons. We also answered the CDP climate change questionnaire and received a B grade for two consecutive years. Following TCFD recommendations,\*1 we performed multiple climate change scenario analyses of Yakult's corporate activities using the Representative Concentration Pathway (RCP) scenarios.\*2

\*1 TCFD recommendations: TCFD stands for "Task Force on Climate-related Financial Disclosures," an international organization established by the Financial Stability Board in 2015. In its final report published in 2017, the TCFD issued recommendations that companies disclose information on climate-related risks and opportunities through scenario analysis to examine risk strategies under various different conditions.

\*2 Analyses were carried out using the scenario with the lowest temperature rise (RCP2.6 scenario, with around 2°C rise) and the highest temperature rise (RCP8.5 scenario, with around 4°C rise)

#### Methods

Based on international recognition and credibility, RCP2.6 and RCP8.5 were used for scenario analyses, with the 2°C and 4°C scenarios considered.

#### Period and region

Considering that the results of the 2100 forecast have too many uncertainties in terms of business strategy and that the Paris Agreement's goal of a net-zero emissions world is set for 2050 at the latest, the period covered by the scenario analysis was set to 2050, and the regions covered were the Group's offices located around the world.

#### Organizational areas

The Company manufactures and sells pharmaceutical and cosmetic products and other products, with its main focus on sales of the fermented milk drink, *Yakult*. In the scenario analyses, we focused on the fermented milk drinks business, our main business.

#### Results of the scenario analyses

Assumptions/inputs for the scenario analysis were CO<sub>2</sub> emissions in the world with 2°C and 4°C temperature rises, the relationship between the physical impact of the temperature increase and the impacts on crops, the likelihood of disasters, changes in the labor environment, and changes in the energy mix and energy costs, and analyses were conducted using publicly available literature as reference. In the 2°C scenario, pastureland is projected to decrease, agricultural land for energy crops to increase, and agricultural land for food and feed crops to decrease. Under these

circumstances, it is possible that procurement of powdered skim milk, the main raw material for the fermented milk drinks that are our key products, may become difficult in the future. For example, we suspect it may become necessary to use protein sources other than milk (such as soybeans) and inexpensive agricultural products, and are developing products based on various safe and secure raw materials. We are also considering the possibility of commercializing foods that contribute to the health of animals, such as the development of probiotic foods that help increase the amount of milk produced by dairy cows.

In addition, with the anticipated tightening of regulations such as carbon taxes and emissions trading, there is a risk that our energy costs will increase and that demands from society for plastic-free options will increase. We must take measures such as reducing our energy usage further and switching our containers and packaging to biomass-derived, renewable plastics. Since the ratio of low-carbon energy is expected to increase and the cost of fuel and electricity is at risk of increasing, we will consider all possible methods, including the development of manufacturing processes that are more energy-efficient than conventional methods and, for specific products such as cosmetics, manufacturing processes that do not use heat.

In the 4°C scenario, climate and weather extremes are projected to advance further, with extreme temperature increases becoming unavoidable. In addition to the difficulty in procuring our main ingredient (powdered skim milk) as in the 2°C scenario, other possible risks include a worsening working environment for Yakult Ladies, consumers going out less frequently, epidemics of infectious diseases, and poor animal and plant health. Along with examining protein sources other than milk, we will consider safe and secure delivery methods that do not rely on humans and the development of useful bacteria that are effective in prevention of new pathogens.

Exposure to water stress such as floods, torrential rains and rainfall shortages is also expected to become more frequent, and plants face the risk of being flooded and forced to suspend production, distribution and sales activities. We will explore the possibility of developing solidified products and other products that can be manufactured with sustainable use of water resources.

#### 2°C scenario

Major impacts	Risks	Opportunities
Fewer livestock farms/more demand for energy crops*	Difficulty procuring raw materials (powdered skim milk)	Development of probiotics and animal feed products to help dairy cows produce more milk
Stricter environmental laws and regulations	Higher costs for energy/compliance with plastic regulations	Switching to containers and packaging using biomass-derived plastic materials
Higher ratio of energy with lower carbon emissions	Higher fuel and electricity costs	Development of energy-efficient production methods for cosmetics, development of non-thermal production methods for particular products

\* Energy crops: Agricultural crops cultivated as raw materials for biofuel use. Grains, sugar cane, etc. Grains once used as dairy cow feed may be used for biofuels instead, causing difficulties in procuring skim milk powder made from raw milk