

**Executive Officer** 

# **Initiatives for the Environment**

Kumiai Group have set "Mitigation of climate change and environmental impact," "Conservation of biodiversity," and "Contribution toward a recycling-based society" as materialities, and aim to help preserve the global environment and realize a low-carbon society by fully utilizing our technologies, knowledge, and R&D capabilities. In addition, we are working to develop and promote products that contribute to both stable food production and sustainable agricultural industry by responding to the "Strategy for Sustainable Food Systems, MeaDRI."

#### Greenhouse Gas (GHG) Emissions and Environmental Data

			GHG emissions (t-CO <sub>2</sub> /year)			
			FY2019	FY2020	FY2021	FY2022
Scope 1	Direct Emissions		47,846	46,718	47,702	47,982
Scope 2	Indirect Emissions according to market-based method/Generated by use of electricity, heat, and steam provided by other companies		19,164	17,307	17,459	18,142
Scope 1+2	Total emissions		67,009	64,024	65,162	66,124
	Emissions per net sales unit (t-CO <sub>2</sub> /Millions of yen)		0.705	0.644	0.605	0.503
Scope 3 Category	1. Purchased goods and services		-	-	-	198,660
	2. Capital goods		-	-	-	27,470
	3. Fuel and energy related activities		-	-	-	15,290
	4. Upstream transportation and distribution		-	-	-	11,715
	5. Waste generated in operations		-	-	-	7,676
	6. Business travel		-	-	-	221
	7. Employee commuting		-	-	-	1,003
	8. Upstream leased asset		-	-	-	C
	9. Downstream transportation and distribution		-	-	-	769
	10. Processing of sold products		-	-	-	C
	11. Use of sold products		-	-	-	C
	12. End-of-life treatment of sold products		-	-	-	3,729
	13. Downstream leased assets		-	-	-	66
	14. Franchises		-	-	-	C
	15. Investments		-	-	-	C
	Total emissions		-	-	-	266,599
		Unit	FY2019	FY2020	FY2021	FY2022
Energy consumption (crude oil equivalent)		KL	33,067	32,899	33,559	33,199
Amount of purchased electricity		Mwh	54,875	56,317	57,016	55,992
Amount of renewable energy		Mwh	12,525	12,544	12,635	12,420
Water intake amount		Thousand m <sup>3</sup>	-	-	-	4,187
Amount of industrial waste		Thousand tons	-	-	-	8.653

\* Targets include seven group companies, which are, KUMIAI CHEMICAL INDUSTRY, RIKENGREEN, IHARANIKKEI CHEMICAL INDUSTRY, K-I CHEMICAL INDUSTRY, Ihara Construction Industry, ONOMICHI KUMIKA INDUSTRY, and KUMIKA LOGISTICS. The ratio of the seven companies' net sales to consolidated net sales (coverage rate) is 90.6% (FY2022)

### Initiatives for "MeaDRI"

Innovation with Balance between Productivity and Sustainability

The Ministry of Agriculture, Forestry and Fisheries formulated the "Strategy for Sustainable Food Systems, MeaDRI" in 2021 as a unique strategy for sustainable food systems in harmony with SDGs.

In response to the "MeaDRI," we are continuing our research to create safe and secure agricultural chemicals, and are accelerating our research and development of microbial pesticides and bio-stimulants as part of our Agricultural Chemicals and Agriculturerelated Business. We also began studying ways to suppress greenhouse gases generated on farmland with the aim of creating value that will contribute to the agricultural industry in various ways. We have already

developed and released agricultural chemical products that are expected to be effective at low dosages along with microbial pesticides that are ahead of the industry. We also developed and launched "MAMETSUBU" as a material for contributing to smart agriculture. It is compatible with different spreading methods such the use of drones, radio-controlled helicopters, and radiocontrolled boats, which contributes to a stable food supply and sustainable agriculture by reducing labor for growers. We will continue working to develop and release products that promote smart agriculture.

## **Contribution to Biodiversity**

Participation in the industry - government university "Satochi-Satoyama Preservation Project"

In collaboration with RIKENGREEN, which is one of our group companies, Utsunomiya University, and the "Satoyama Oogisu wo aisuru kai" association, we participated in the industry - government - university "Satochi-Satoyama Preservation Project" (Cabinet Office certification) that utilizes the corporate version of the hometown tax system in Nasukarasuyama City, Tochigi Prefecture. The increase in unused farmland and decay of forests has resulted erosion due to weeds, and is becoming a serious issue. Currently, weeds are removed using trimmers, but such individual efforts have limitations. Therefore, the "Satochi-Satoyama Project to Eliminate Weeds" was launched as part of the "Satochi-Satoyama Preservation Project." Kumiai Group is aiming to achieve laborsaving weed control using a "Plant growth regulator" SHORTKEEP. "Satochi-Satoyama" areas (between towns and mountains) are important for the supply of natural resources such as food and timber, beautiful landscapes, replenishing water resources, and national land conservation, and are vital habitats for various plants and animals. We will contribute to promote biodiversity through demonstration tests using our group chemicals and technologies for implementing initiatives to revitalize Satoyama areas.





Satochi-Satovama Preservation Project

SHORTKEEP

### Activities for Maintaining and Managing Mountain Forests in Hokkaido

In 1974, we purchased approximately 640 hectares of forest in the town of Fukushima, Hokkaido, and made an agreement with the Fukushima Forest Cooperative to maintain and manage the forest, which we have continued to do until today. As a secondary effect of the forest preservation, in recent years water source conservation functions (water purification functions and water storage functions) have improved, which has resulted in sufficient nutrients flowing to nearby oceans via rivers, that benefits squid and seaweed in the area, which are local specialties. We provide the lumber from forest thinning that is done to foster good Japanese cedars to Fukushima, which has resulted in local employment through forest management activities. This has allowed us to contribute toward local revitalization while also promoting biodiversity.

In July of 2022, we entered into a comprehensive partnership agreement with Fukushima, Hokkaido, and the Fukushima Forest Cooperative. For the future of Fukushima, which is home to abundant nature, we will promote initiatives including contributing to a sustainable society by utilizing agriculture-related technologies and other new techniques such as ICT.

#### **Comprehensive Partnership Agreement Items**

- 1) Contributing to a sustainable society (Reduction of greenhouse gases)
- 2 Promoting industries that use local resources
- ③ Child learning through nature
- (4) Regional revitalization by giving back to the countryside
- (5) Other items to be determined based on consultation among the three parties



Mayor of Fukushima, Hokkaido NARUMI Kiyoharu(left), President of Kumiai, TAKAGI Makoto(right)