MC and Maruha Nichiro Agree to Establish New Joint Venture in Salmon (land-based)

Mitsubishi Corporation (MC) and Maruha Nichiro Corporation (Maruha Nichiro) are pleased to announce our agreement to establish a new joint venture company, ATLAND Corporation (ATLAND), that will specialize in the land-based production of salmon. ATLAND will be established in Nyuzen town of Toyama prefecture in around October 2022.¹

The investment ratio of ATLAND will be MC 51% and Maruha Nichiro 49%. Following the establishment of the company, a land-based aquaculture facility with a capacity of 2,500 tons (live weight equivalent) will be constructed in Nyuzen town, with the aims of starting operations in 2025 and completing the first delivery in 2027.

MC and Maruha Nichiro have been discussing the joint promotion of this project since March 2021. This project is expected to help develop a sustainable and stable land-based production system, efficient digital-tech-based operations, local production for local consumption, and progress in decarbonization. Our companies are both dedicated to leveraging our strengths and businesses to simultaneously generate economic, environmental and societal value.

■ Local Production for Local Consumption of Salmon

There are few suitable locations for conventional salmon aquaculture, due to the need for year-round low seawater temperatures, mild weather and wave activity. For those reasons, the vast majority of the world's farmed salmon is produced in Norway and Chile, but expectations are that global demand for this high-quality animal protein will continue to grow in the future. The aim of our joint project is to create a local-production-for-local-consumption business model in Japan's salmon industry.

Low-Carbon, Carbon-Free / Digitalization

This business model is expected to produce fewer greenhouse gas emissions compared to the practice of importing fresh salmon to Japan by air from salmon-farming countries.

In addition, land-based aquaculture that uses Recirculating Aquaculture Systems (RAS)² is highly compatible with digital technologies. These systems use advanced water-treatment technologies to control and manage the farming environment. By employing these methods, we aim to take advantage of AI and IoT to stabilize production, and otherwise optimize our own salmon farming operations.

■ Water Resources in Nyuzen Town

ATLAND's facility uses ground water originating from the Kurobe River and deep seawater³ from the Toyama bay. Deep seawater is characterized by its cleanliness and low, stable temperature, which makes it possible to operate the facility by reducing the amount of energy required to create a water environment suitable for land-based production.

- 1. Completion of this project is subject to the approval of the relevant regulatory authorities.
- 2. This model of land-based salmon aquaculture involves using special technologies to circulate water in and out of tanks where the fish are raised. The water is treated, removed of waste, and cleaned before it is pumped back into the tanks. This creates a controlled environment that supports health and welfare of the salmon throughout the growth cycle.
- 3. In Toyama prefecture, a large amount of low-temperature "Japan Sea Proper Water" exists at depths of 300m or more. It is defined as having a temperature below 2.0°C, salinity level of greater than 34.00%, and less than 7.0ml 1⁻¹ of dissolved oxygen.

<Company Profile>

Mitsubishi Corporation

Date of Establishment	July 1954	
Address	2-3-1 Marunouchi, Chiyoda-ku, Tokyo	
Representative	Katsuya Nakanishi, President & CEO	
Capital	204 billion JPY	
Business Description	Wide range of businesses spanning multiple industries and overseen by	
	10 Business Groups: Natural Gas, Industrial Materials, Petroleum &	
	Chemicals solution, Mineral Resources, Industrial Infrastructure,	
	Automotive & Mobility, Food Industry, Consumer Industry, Power	
	Solution, and Urban Development.	

Maruha Nichiro Corporation

Date of Establishment	March 1943
Address	3-2-20 Toyosu, Koto-ku, Tokyo
Representative	Masaru Ikemi, President & CEO
Capital	20 billion JPY
Business Description	Fishery, Aquaculture, Trade - Processing - Sales of Marine products,
	Manufacture and Sales of Frozen and Retort foods / Canned foods /
	Surimi products / Chemical products / Beverages, Import of Meat and
	Feed materials, Manufacture and Sales of Meat products, First complete
	bluefin tuna farming in private sector.

ATLAND Corporation

Date of Establishment	October 2022 (tentative)
Address	Shimoiino, Nyuzen-machi, Shimoniikawa-gun, Toyama (tentative)
Business Description	Land-based Aquaculture Production and Sales of Salmon by using
	Recirculating Aquaculture Systems.
Investment Ratio	MC 51%, Maruha Nichiro 49%
Total Project Cost	About 11 billion JPY

<Inquiry Recipient>

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