

## TECH OFFER

### Client-based Algae Platform for a Better World



#### KEY INFORMATION

TECHNOLOGY CATEGORY:

Life Sciences - Agriculture & Aquaculture

TECHNOLOGY READINESS LEVEL (TRL): **TRL7**

COUNTRY: **JAPAN**

ID NUMBER: **TO174974**

#### OVERVIEW

Algae are very diverse organisms that possess many functional ingredients. With the suitable cultivation know-how and state-of-the-art technology, the applications for algae are limitless.

A cleantech start-up focuses on algae as means to provide sustainable solutions to global issues. Most algae companies use a single alga for specific applications. However, the start-up uses its intensive library, breeding and cultivation expertise, and its mass production technology to provide targeted products and solutions for different industries.

The start-up is seeking for partners that are interested in exploring algae for their industrial applications, which can include food, medical, or environmental purposes. Possible modes of collaboration include technical consultancy, R&D, process and/or product development.

## TECHNOLOGY FEATURES & SPECIFICATIONS

The start-up offers an “Algae Platform” that consists of the following:

- Consulting
- Intensive Strain Library Screening
- Breeding Technology and Cultivation Expertise
- Small-Scale Pilot Production Facility

Based on the needs of the clients, strains from the library are screened for the targeted products. Following identification of suitable strains, the next step would be a sustainable cultivation method/facility for the algae. This platform assures ongoing consultation between the start-up and its clients so as to achieve the targeted products that the clients desire. At present, the start-up has algae strains that are promising in terms of their protein content, oil content and functional ingredients.

## POTENTIAL APPLICATIONS

Potential applications of leveraging this algal platform technology include but not limited to:

- Alternative Protein
- Biomaterials
- Dietary Supplements
- Cosmetics
- Foods
- Nutraceuticals
- Pigments

## UNIQUE VALUE PROPOSITION

For potential partners, a business benefit can include the opportunities for consultation and identification of suitable algal applications that can benefit their business. This is especially relevant if partners are interested in a more sustainable source of their target products (i.e., alternative protein, biomaterials and functional ingredients).

Environmental advantages include negative carbon footprint due to CO<sub>2</sub> utilization by algae and less land usage.