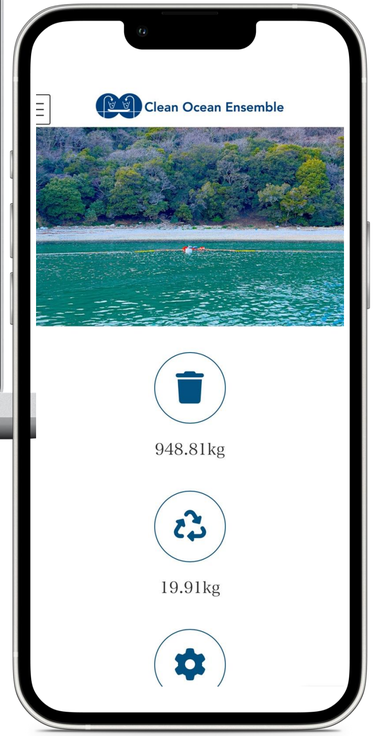
Clean Ocean Ensemble

A Global Platform for Marine Debris Collection and Recycling.

Director　Takuya Yasui
（JICA Volunteer　Maputo, Mozambique　Environmental Education（Jan,2017～ Jan, 2019））



Clean Ocean Ensemble

VISION ：

The world of ZERO marine debris

MISSION ：

Developing innovative technologies, advancing business bases, and creating a system that reduce marine waste and support long-term, sustainable use of ocean.

LOCATION：

Shodoshima, Kagawa Prefecture, Japan

Maputo, Mozambique

Vũng Tàu Vietnam

Problem of Marin Debris

Clean Ocean Ensemble

Marine Debris Problem：

Millions of tons of waste are dumped into the oceans every year, causing severe damage to marine ecosystems and wildlife.

Social and Environmental Impact：

Ocean pollution negatively affects fisheries, tourism, and human health.

To Solve These Issues

How much we need to collect?

How much is being collected?

Economical Impact：

Negative impact on tourism, fisheries, aquaculture etc (Annual loss of about $13 bilion)

Marine Debris in Shodoshima, Kagawa Prefecture

Marine Debris in Mozambique

Our solutions

Clean Ocean Ensemble

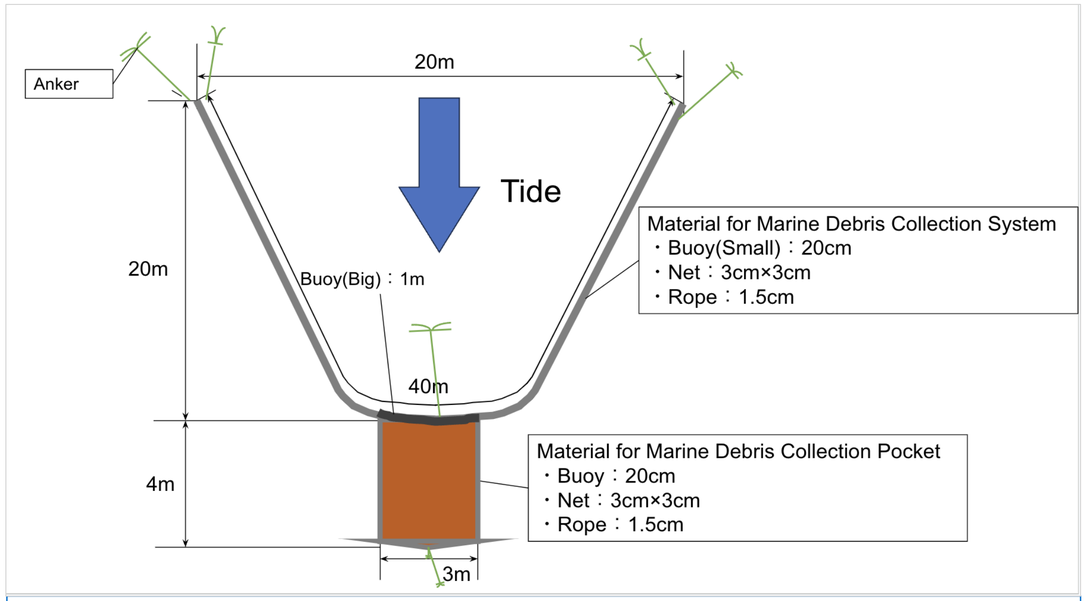
Marine and River Debris Collection System

Marine and River Debris Map

Marine and River Debris Collection System（Using natural power to collect debris）

Clean Ocean Ensemble

Marine Debris Collection System



Design of Marine Debris Collection System

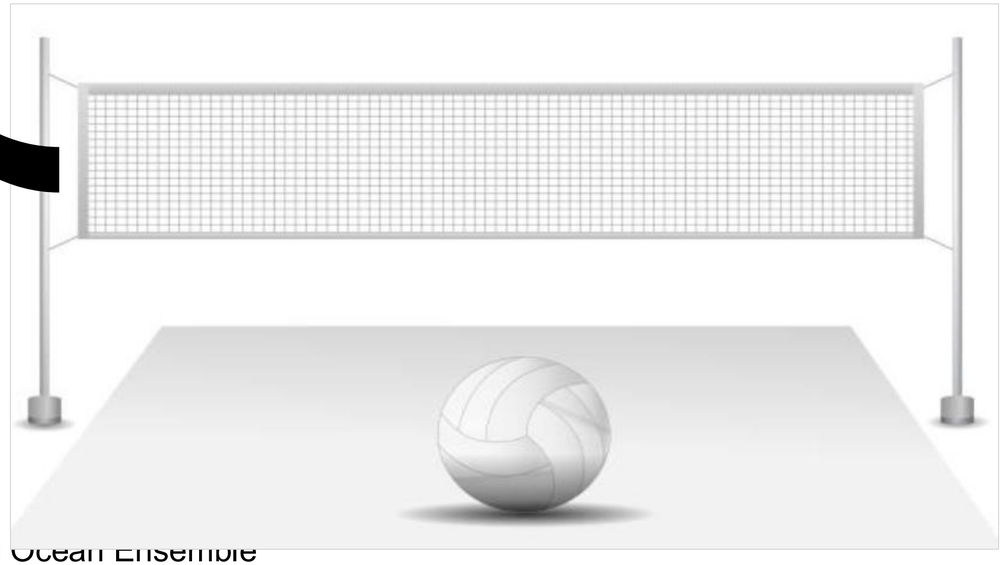


Image of volleyball net submerged in the ocean.

Using the power of tidal current in oceans and rivers, and drifting debris is automatically collected when it’s installed.

Marine and River Debris Collection System （Using natural power to collect debris）

Clean Ocean Ensemble

Working with fisherman in Shodoshima to set up a collection system

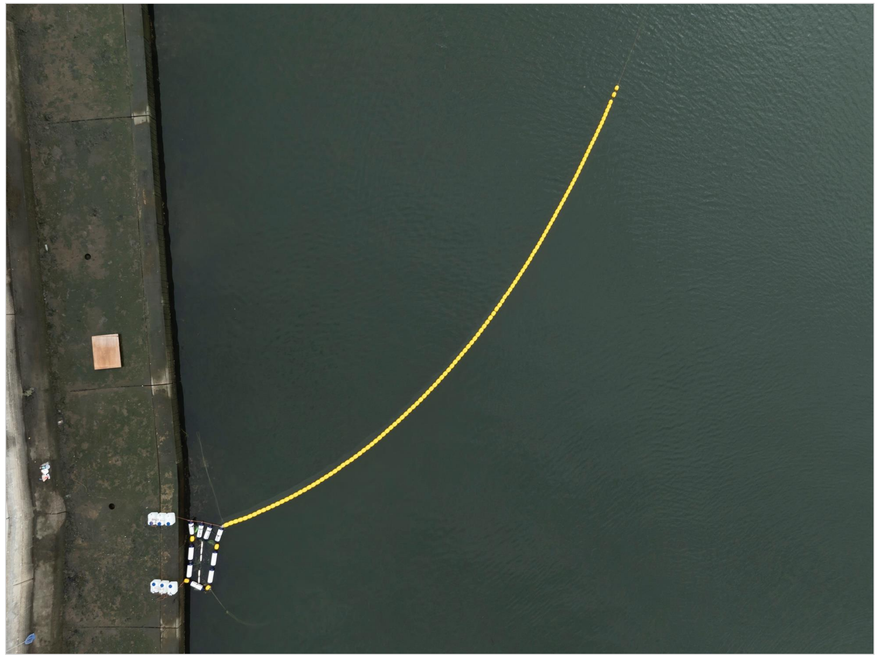
Beach with difficult access for collecting debris due to a cliff in the background @ shoudoshima

Working with local fishermen and receiving advice on the structure, creation and location of Debris Collection System.

Installing in inaccessible locations to collect marine debris and increase the amount of collection.

Marine and River Debris Collection System（Using natural power to collect debris）

Clean Ocean Ensemble



River Debris Collection System in Kagawa Prefecture

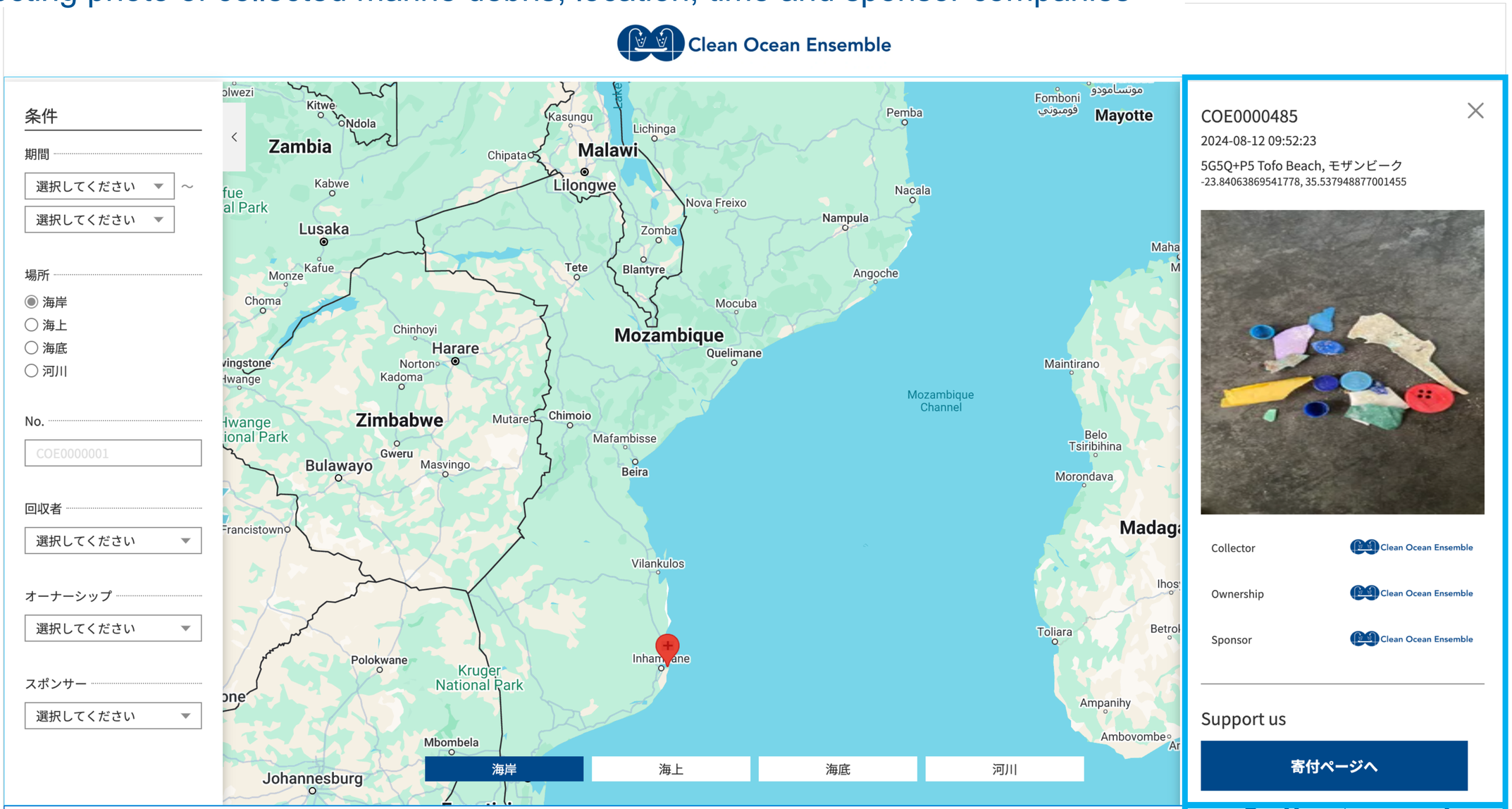
We’ve also developed a collection system for river debris.

This system has been installed in river to collect river debris before it’s discharged into the ocean.

Marine and River Debris Map：

Clean Ocean Ensemble

Map reflecting photo of collected marine debris, location, time and sponsor companies



Collected location information and sorting screen

Collector and sponsor company information

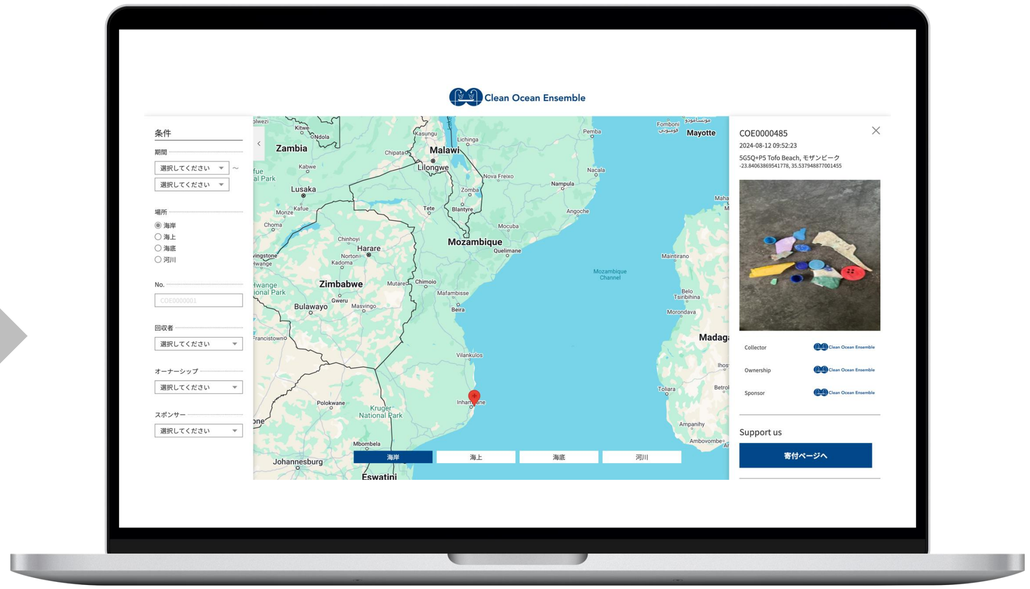
How to use Marine and River debris Map

STEP 1

Collecting Debris

STEP 2

Taking a photo of debris and uploading to the Map



STEP 3

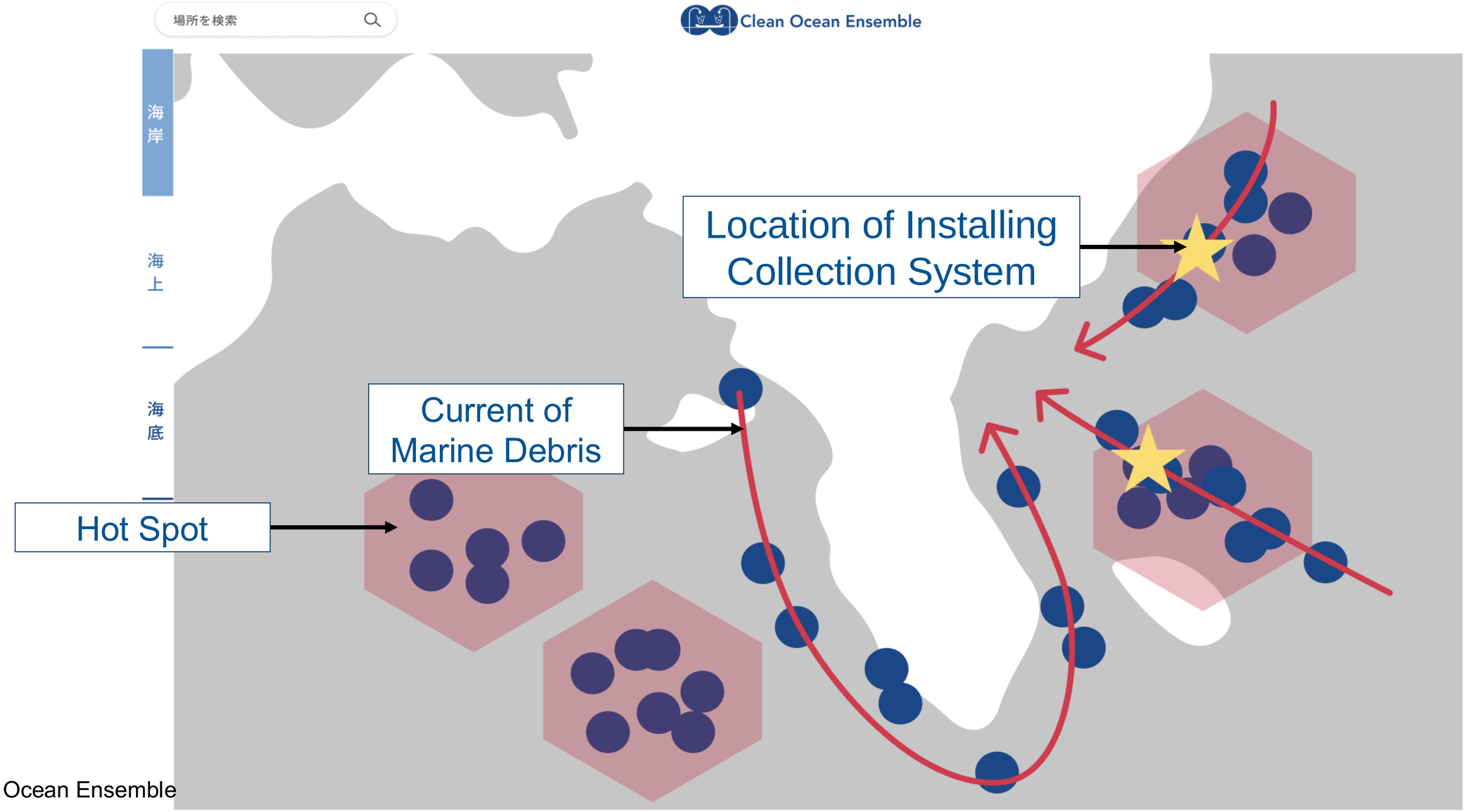
Mapped debris information to the system

The Effect of the Map→Improving Collection Efficiency：

Clean Ocean Ensemble

By collecting debris data, the location where debris collect (Hot Spots) can be visualized,

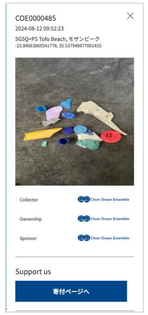
and be leading to more efficient marine debris collection.

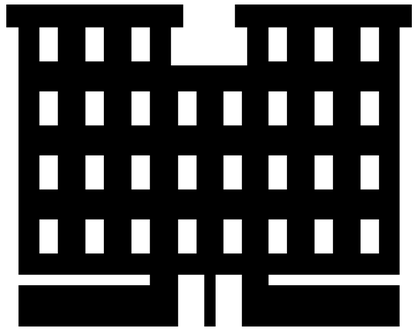


Business Model of Using Marine and River Debris Map :

Clean Ocean Ensemble

Issuing certifications and credits for the results of collected debris can lead to incentives for collectors,
and participation by companies that want to contribute to marine debris control.

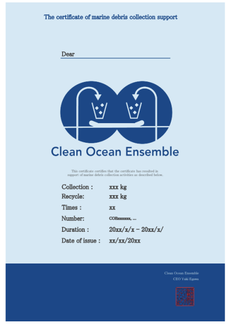




Companies

Purchase of collection right / credis

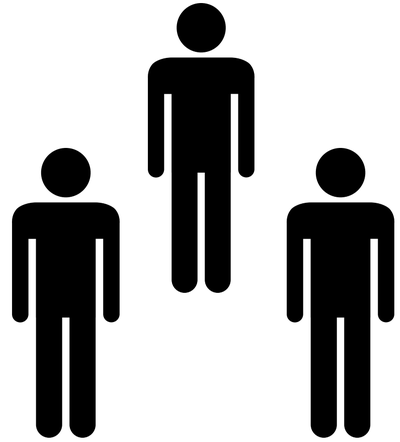
Issuans of credis and certificates



Clean Ocean Ensemble

Incentives

Collection Data (Quantity, items, locations etc)



Collectors

About Mozambique Project（Since April 2024）：

Clean Ocean Ensemble

Working with local fishermen to create and install Marine and River Debris Collection System

Production Process

About Mozambique Project （Since April 2024） :

Clean Ocean Ensemble

2 demonstration tests were conducted at sea. We installed this system for 6h on each tests and could collect marine debris.

When we implemented this project, we could obtain a project agreement from the Ministry of Fisheries.

1st Demonstration Test

2nd Demonstration Test

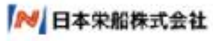
About Mozambique Project （Since April 2024） :

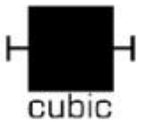
Clean Ocean Ensemble

We also conducted a demonstration test to install the system in a river and collect river debris.

When we implemented this test, we could obtain the cooperation of the city hall and local police.

We have received support from many companies and organizations.





Clean Ocean Ensemble

”Toward a World with ZERO Marine Debris”

To realize this grand goal, it’s not enough for us to do it alone.

Let’s work ENSEMBLE (Together) to tackle this problem!

Thank you!　Muito Obrigado!