FONDATION JACQUES ROUGERIE
GÉNÉRATION ESPACE MER
INSTITUT DE FRANCE
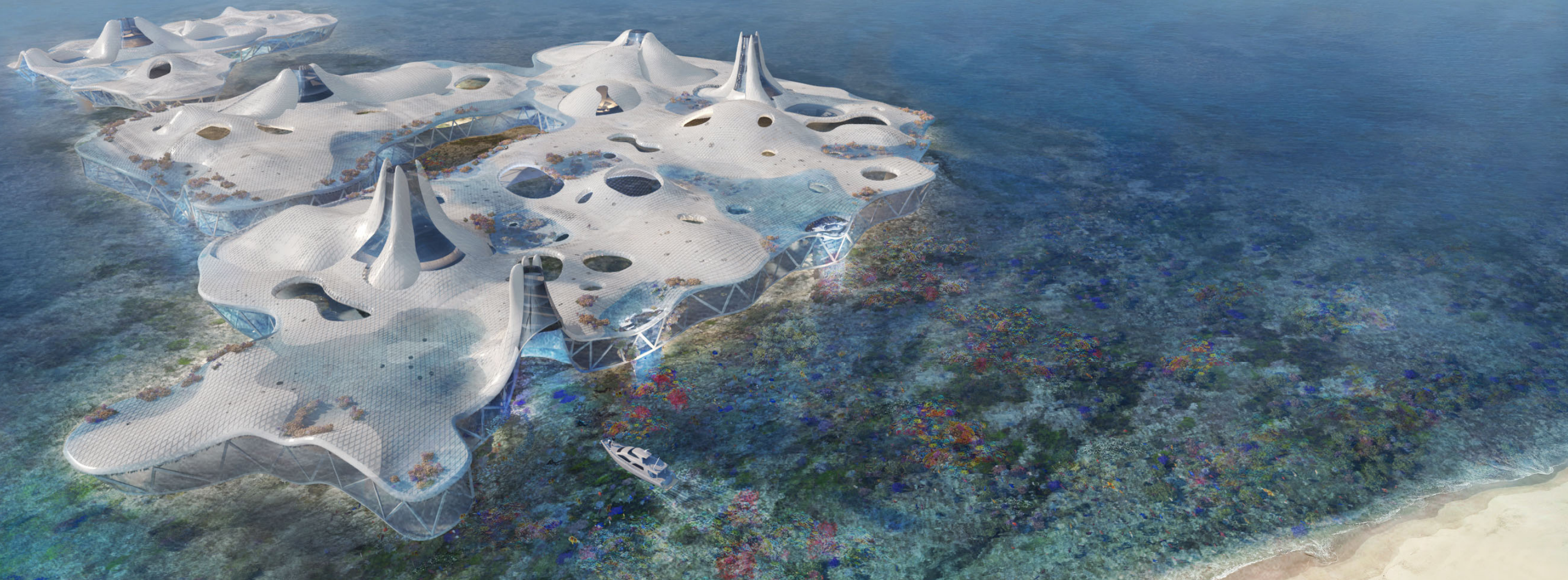
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ARCHITECTURE ET INNOVATION POUR LA MER

PROMO 2021

Infirmière de la mer / SEA NURSE

Sea Nurse is the sustainable learning center to restore the various marine environment by regenerating coral reefs bleached by the global warming.
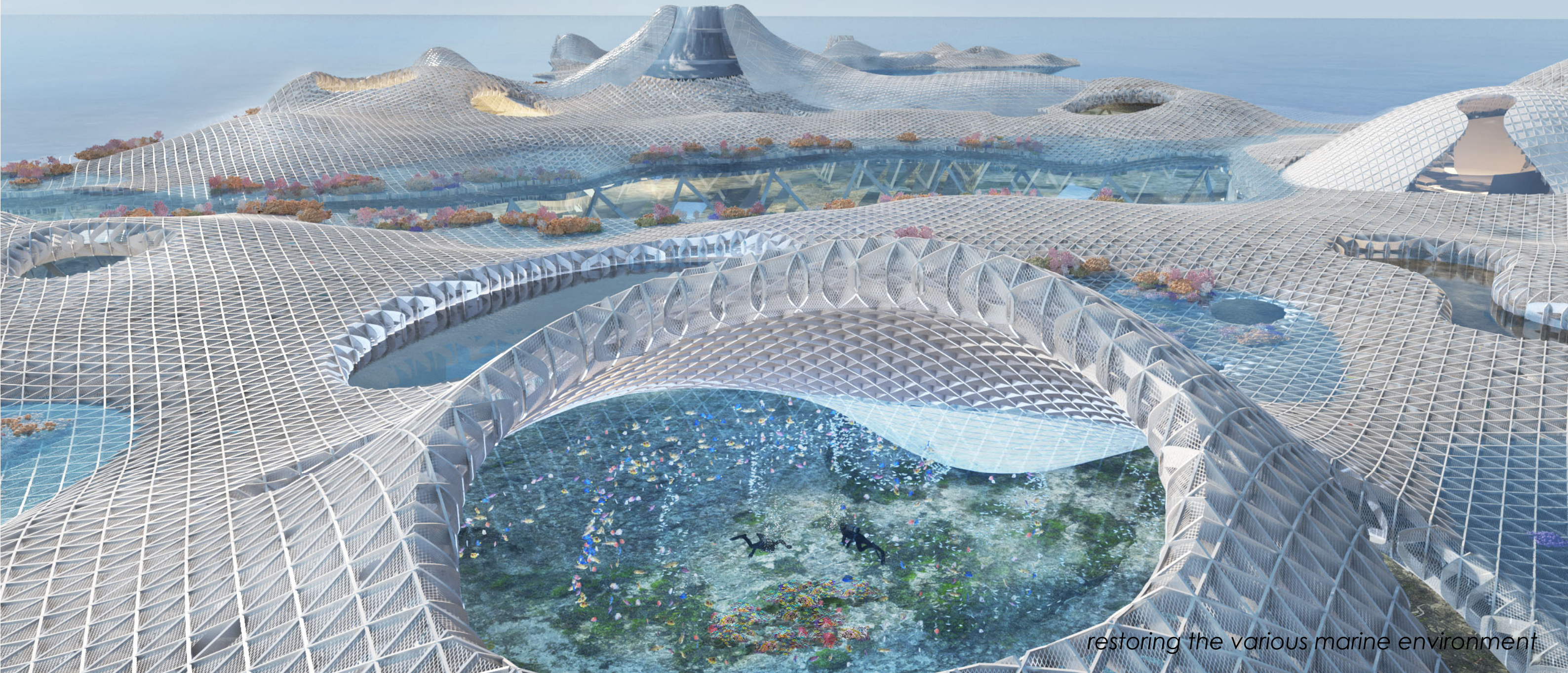
Equipe :
Wataru MARUYAMA Marina OUCHI Sei MABASHI
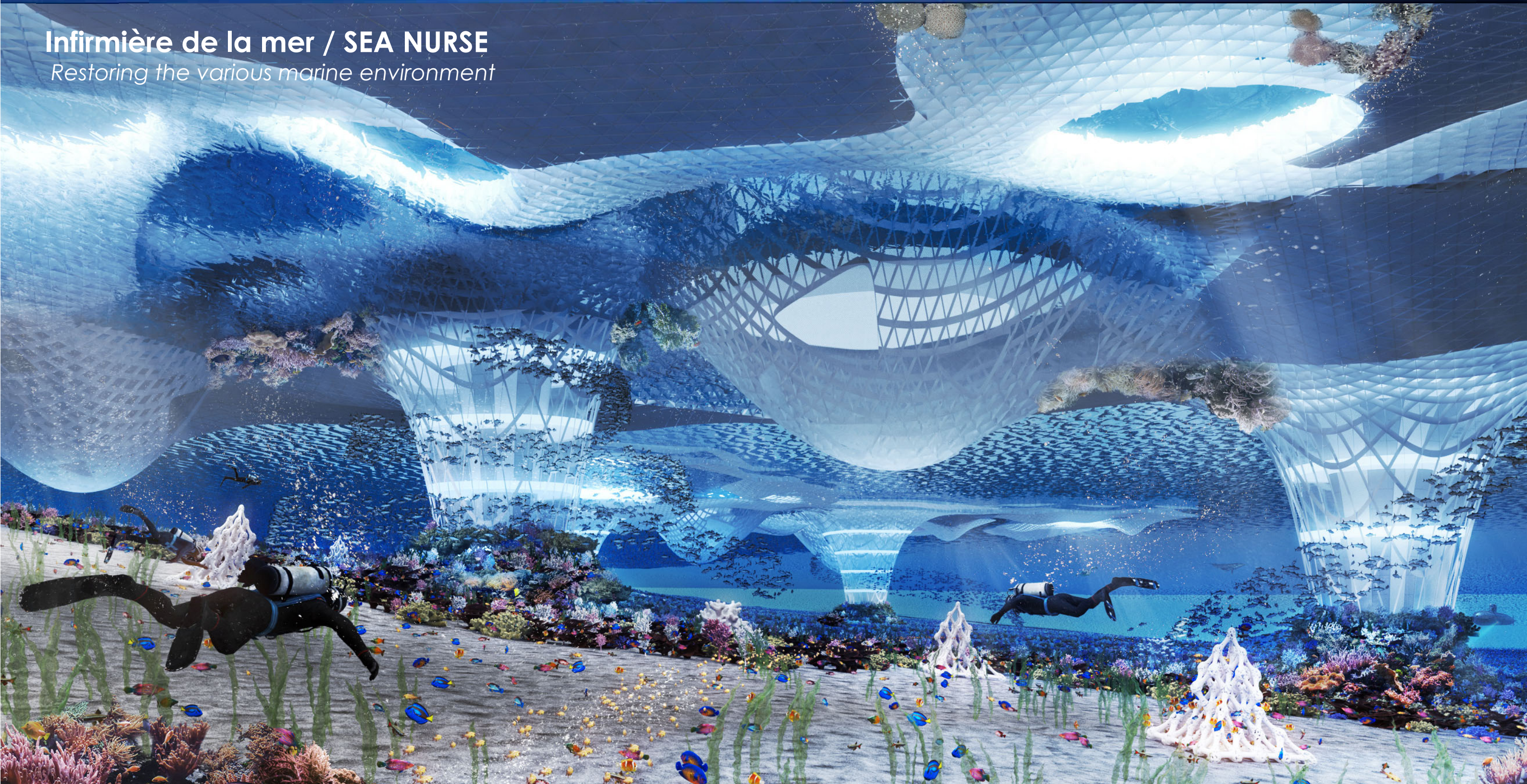*Yoshitomo IZUMI Syungo KUSANO Yudai MOTOMURA Yuto TAUCHI*
Pays :
JAPAN

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Infirmière de la mer / SEA NURSE
Biomimetic Landscape

restoring the various marine environment

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Infirmière de la mer / SEA NURSE
Restoring the various marine environment

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Infirmière de la mer / SEA NURSE
Approach

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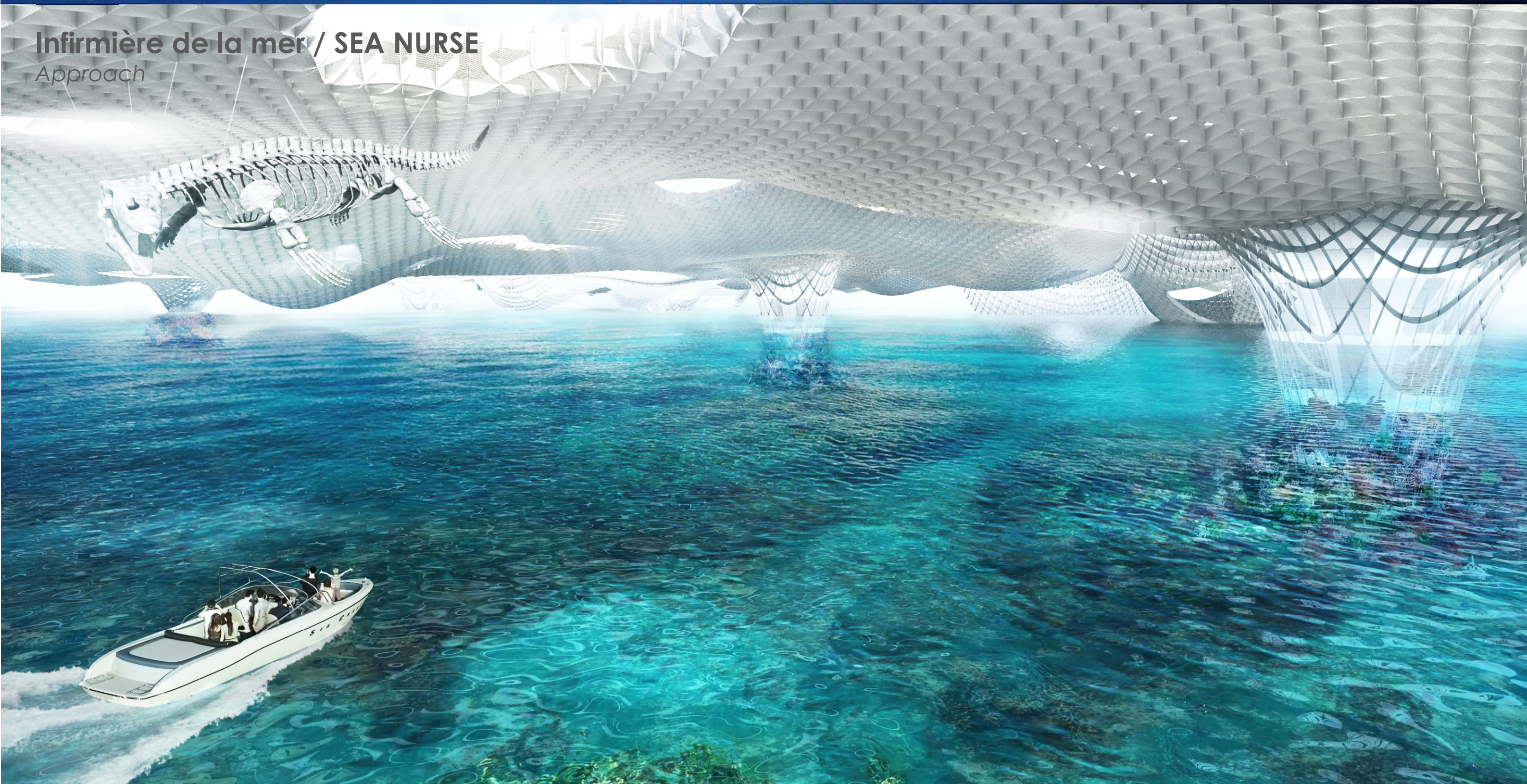
Infirmière de la mer / SEA NURSE
Exhibition Space

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Infirmière de la mer / SEA NURSE

Minimal footprint and infrastructure for bio-diversity

Filtration Unit

Solar Power
Generation

Radiative Cooling Unit

Tidal Power
Generation

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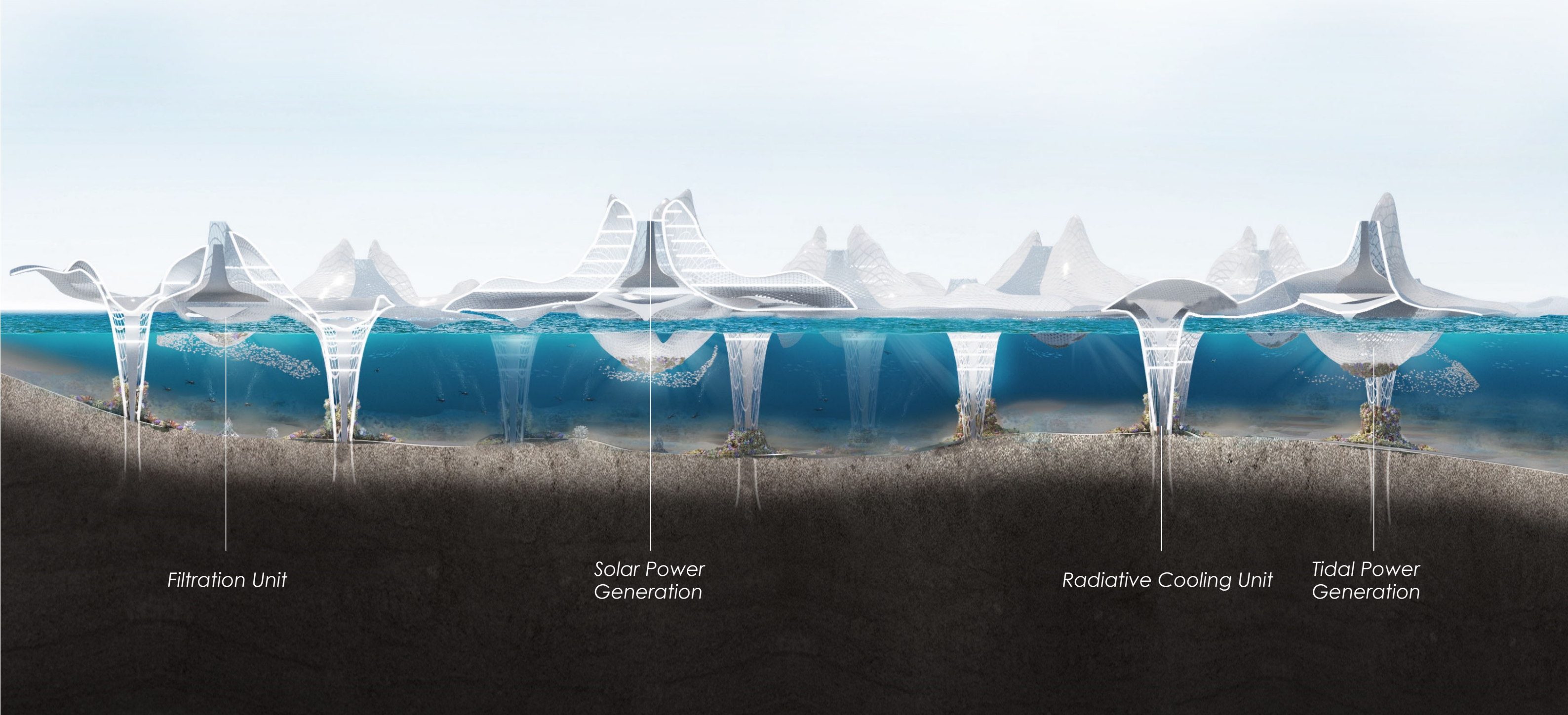
ENVIRONMENT

Coral Bleaching due to Deterioration of Marine Environment and Ecosystem

RISING SEA TEMPERATURE
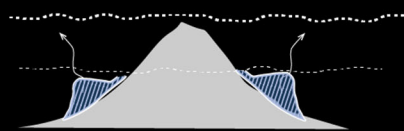

MARINE POLLUTION

BLEACHED CORAL REEF

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ARCHITECTURE GROWING SYSTEM

Introducing the Natural Cycle of Coral Reef into Artificial Reef Terrain

Natural Coral Growing System
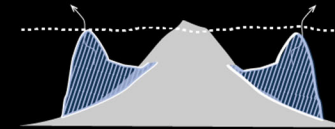
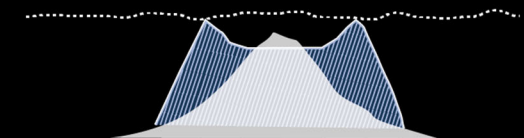*Artificial Coral Building System*

NATURE

ph.1

ph.2

ph.3

FRINGING REEF

BARRIER REEF

ATOLL

SEA NURSE
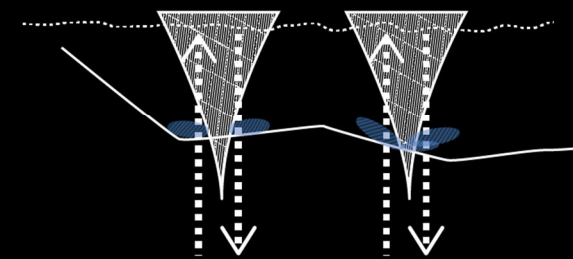
RADIATIVE COOLING UNIT
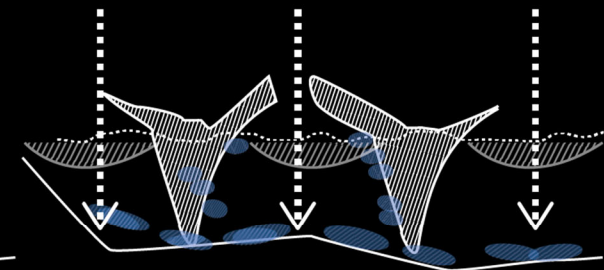
FILTRATION UNIT

VARIOUS MARINE ENVIRONMENT

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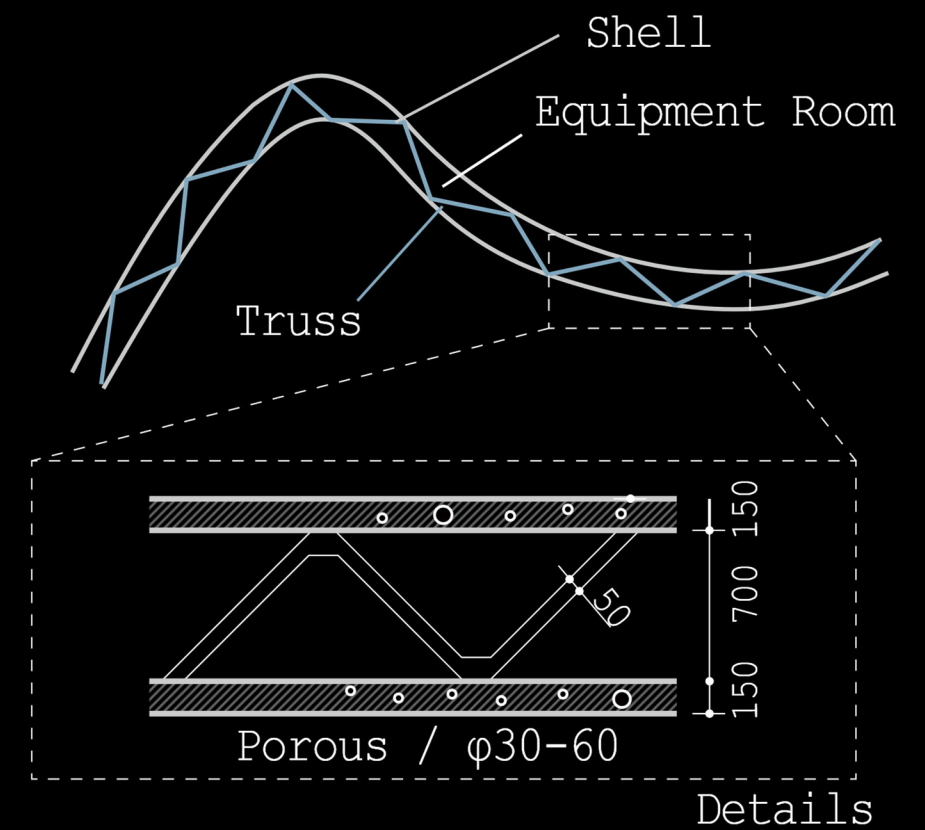INSTITUT DE FRANCE
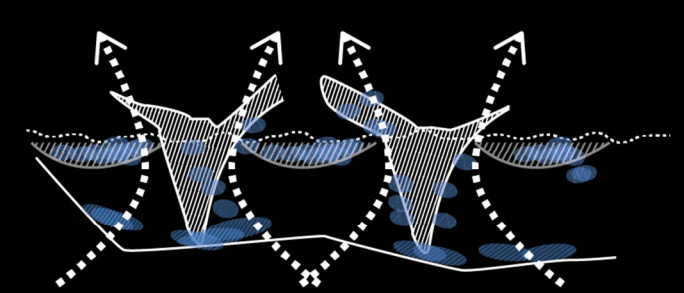
STRUCTURE SYSTEM

Biomimetic Shape Constructed by 3D Printer and Fine Ceramics, Lightweight 3D Truss Structure

3D Printed STRUCTURE

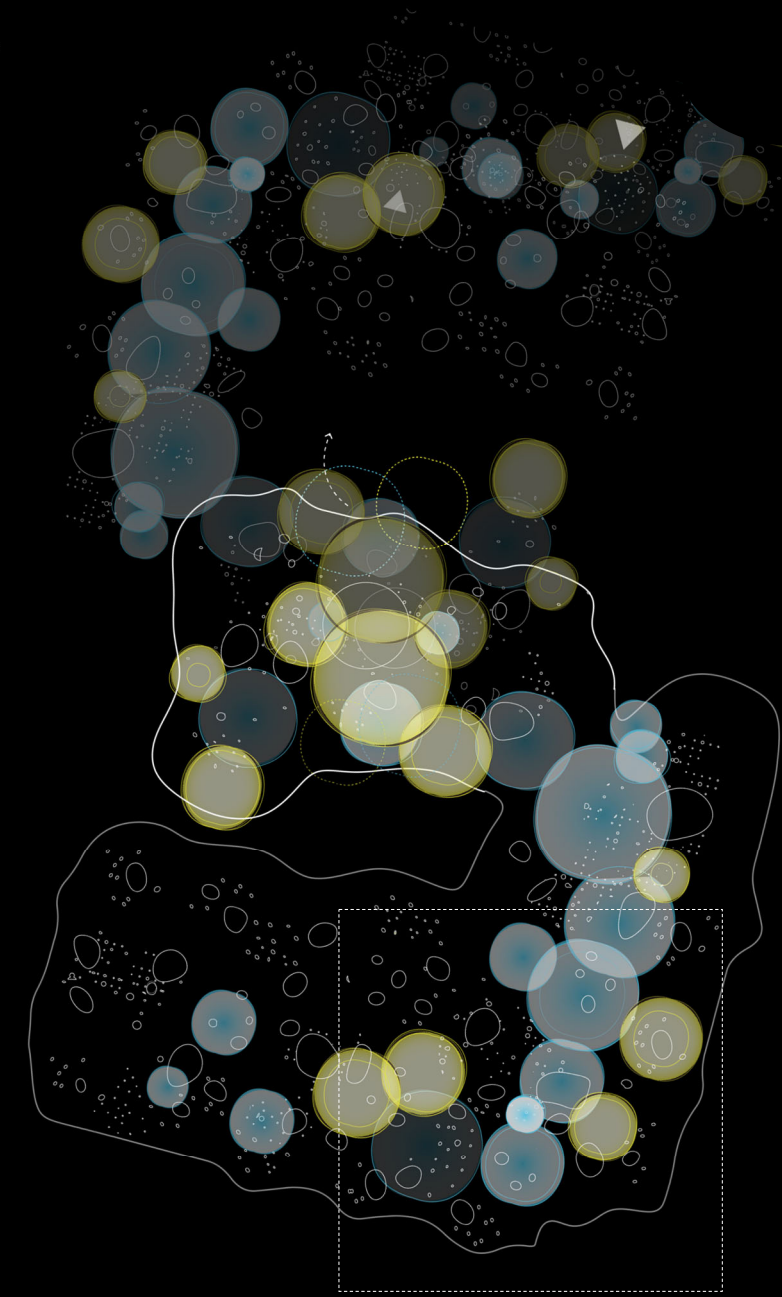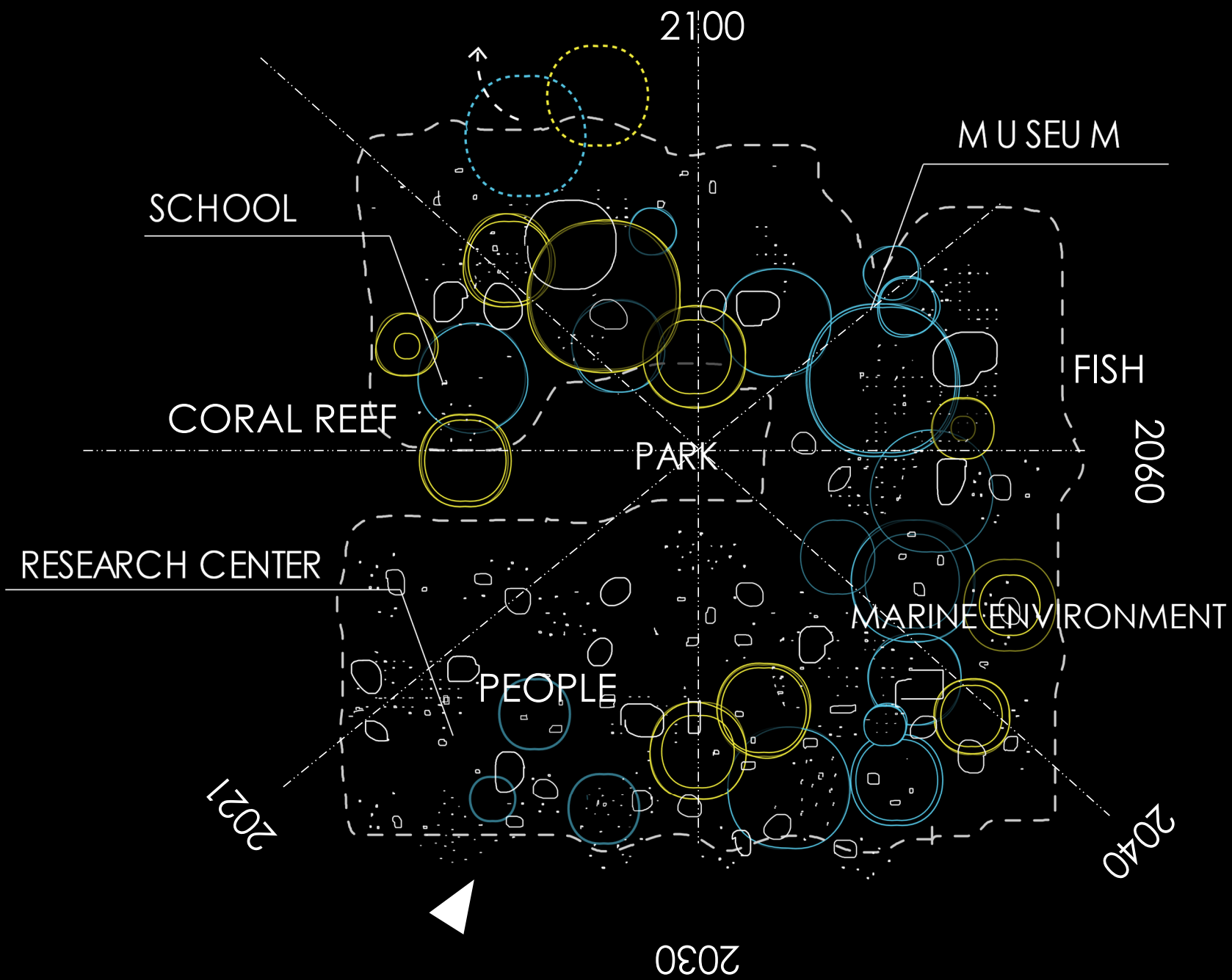*Structure of an Artificial Reef*

3D Truss Frame that Maximizes Buoyancy

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GROWING LEARNING CENTER

Platform where the facility of improvement and learning coexists and enlighten people

2100

MUSEUM

SCHOOL

FISH

CORAL REEF

PARK

2060

RESEARCH CENTER

MARINE ENVIRONMENT

PEOPLE

2021

2040

2030

GROWING LEARNING CENTER