Smart Island Pilot Project
in South Sulawesi, Indonesia

OC GLOBAL

About us

OC Global is a leading, integrated engineering consulting firm committed to excellence, innovation and sustainability.

Years of the Establishiment	Number of employees	Annual sales	Countries worked
1957	**1,155**	**US$205 mil**	**150+**
	as of 1st of August 2022 (including Overseas Subsidiaries)	(2020-21)	

Sectors

- Agriculture and Forestry
- Airports and Aviation
- Architecture
- Disaster Recovery and Resilience
- Energy and Power
- Environmental Management
- Ports and Marine
- Post-conflict Reconstruction and Peacebuilding
- Railways and Mass Transit
- Roads, Bridges and Tunnels
- Smart Cities
- Tourism
- Transportation and Logistics
- Urban and Regional Development
- Water and Sanitation
- Water Resource Management
- Railway O&M
- Renewable Energy

Services

- Asset Management
- Capacity Building and Training
- Construction Supervision
- Design
- Design Review
- Environmental and Social Safeguards
- Feasibility Studies
- Operation and Maintenance
- Planning
- Project Formulation and Financing
- Project Management
- Studies and Investigations
- Tender Assistance
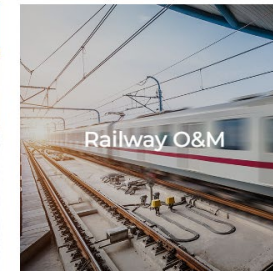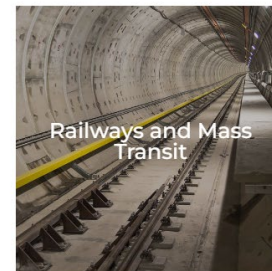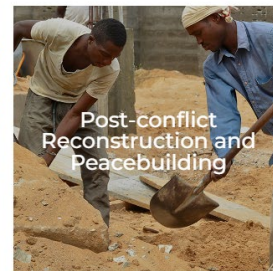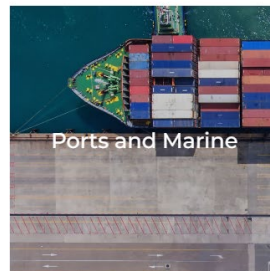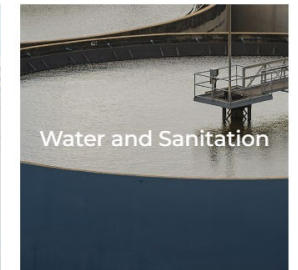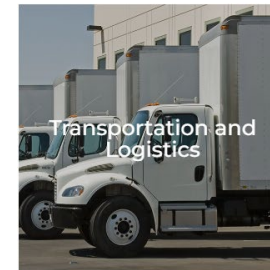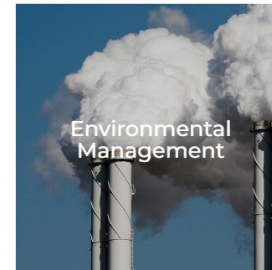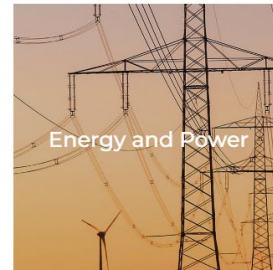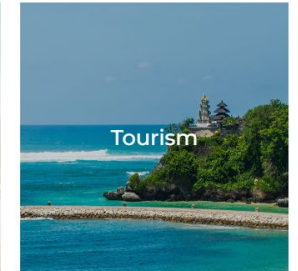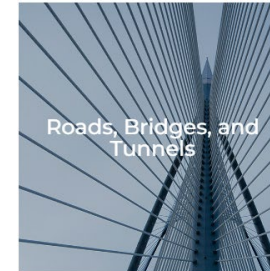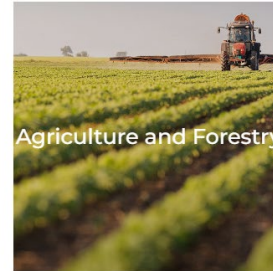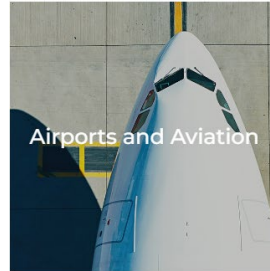
Project background

Project backgroud

- Aug. 2021 - Feb. 2022: **MLIT Smart JAMP** feasibility study with an electric utility company
- Aug. 2022 - Feb. 2023: **JICA Indonesia** feasibility study with two electric utility companies
- Dec. 2022: Presentation at the **4th ASEAN-Japan Smart City Network High-Level Meeting**
- Oct. 2023: Declaration of the implementation at the **5th ASEAN-Japan Smart City Network High-Level Meeting**

Feasibility study result

Power Sector
- The government is aiming for 100% electrification.
- Electricity supply to some islands is only at night.

Fisheries
- Insufficient ice to keep fish fresh
- Price difference depending on the fish freshness (2x)
- Price difference in the domestic high-end market (3x)
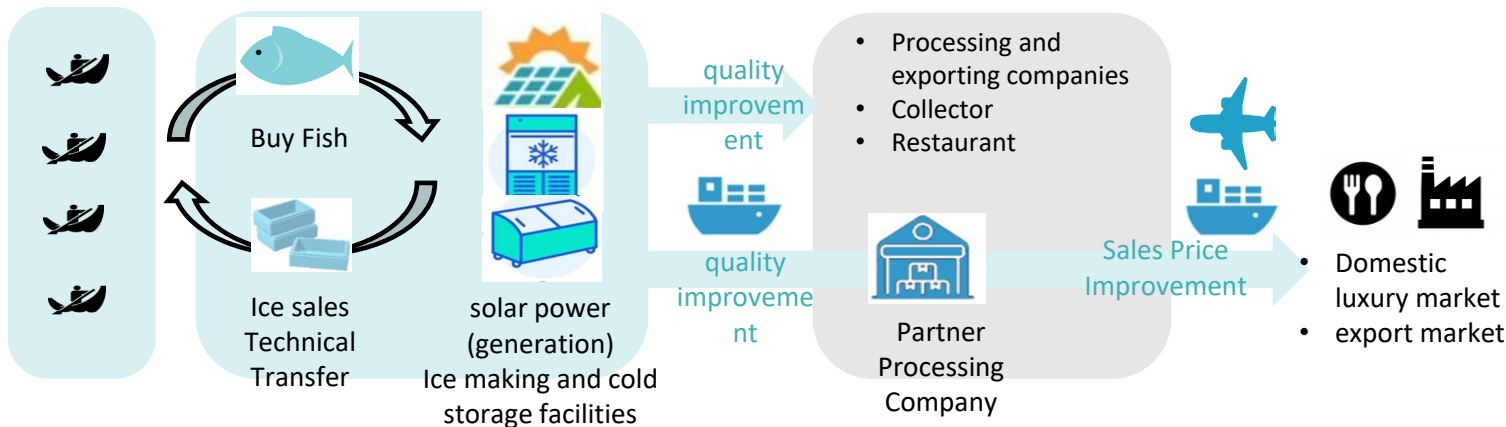
Remote island

Mainland

Project outline

To build **a cold chain system using solar PV** in remote islands without daytime electricity.
The system will improve the fish quality and **upgrade the fishery industry on the remote islands**.

Business components

Power generation: **Generate electricity by PV** + DG during the day (no selling)
Cold chain: **Sell ice** to fishermen
Fisheries: **Buy fish** from fishermen and **sell fish** to market
Technical transfer to fishermen

Pilot Project area

- **Barrang Lompo Island, Makassar City, South Sulawesi Province**
- Population 5,000

Buy Fish

Ice sales
Technical
Transfer

solar power
(generation)
Ice making and cold
storage facilities

quality
improvement

quality
improvement

- Processing and exporting companies
- Collector
- Restaurant

Partner
Processing
Company

Sales Price
Improvement

- Domestic luxury market
- export market

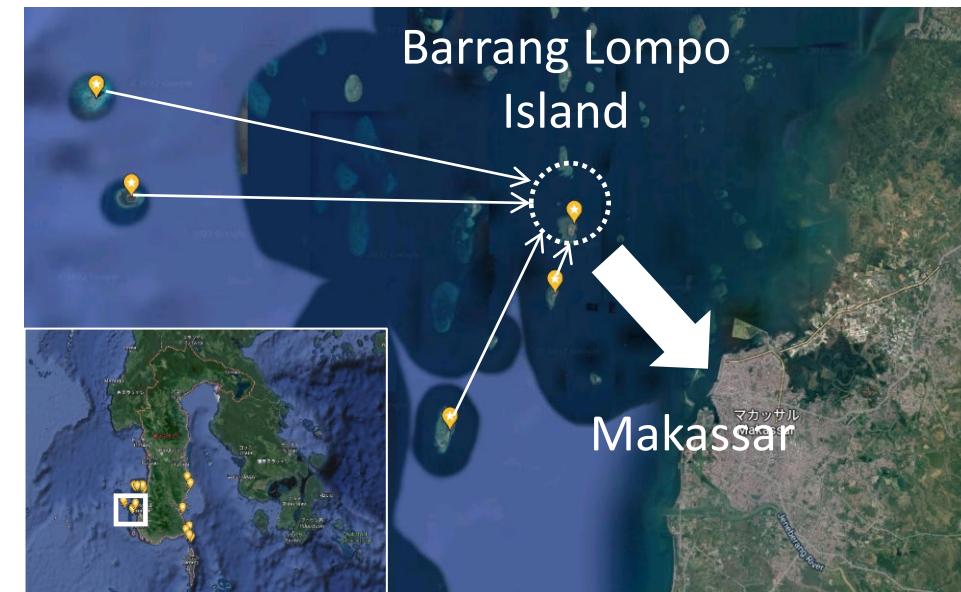Barrang Lompo Island

Makassar

Contribution to SDGs

2 ZERO HUNGER — Cold chain system helps reduce post-harvest losses, increase food availability, and improve food security

7 AFFORDABLE AND CLEAN ENERGY — Renewable energy supplies electricity to the fishery industry

13 CLIMATE ACTION — The carbon footprint of the fishery industry can be reduced.

Key Points of the Business

- Intervention in the fishery value chain is needed to improve quality and selling price
- It is important to build a robust business structure for these interventions.

| Fishermen | → | Collector | → | Processing and exporting companies | → | Market |

Quality Improvement

Sales price improvement

1. Technical support	Guidance on fishing methods and ice use		Quality checks, market information, negotiations	
2. Cold chain	Fishermen's Network	Ice making and cold storage facilities	Storage and processing facilities	logistics network
3. Sales destination				Sales Network

Pilot project scheme

Ministry of
Home Affairs

PLN

Makassar City
Government

Guide for

$$ ← / Electricity →

Technical transfer

Permit, Administrative coordination

Partnership

Employed Islanders

Hasanuddin University
& OCG/PT OCI &

Fish →
$$ ←
Ice ←
$$ ←

Fishermen

$$ ←

Fish →

New market
Export market
High end market

Existing market
Big collector
Local market

$$ ←
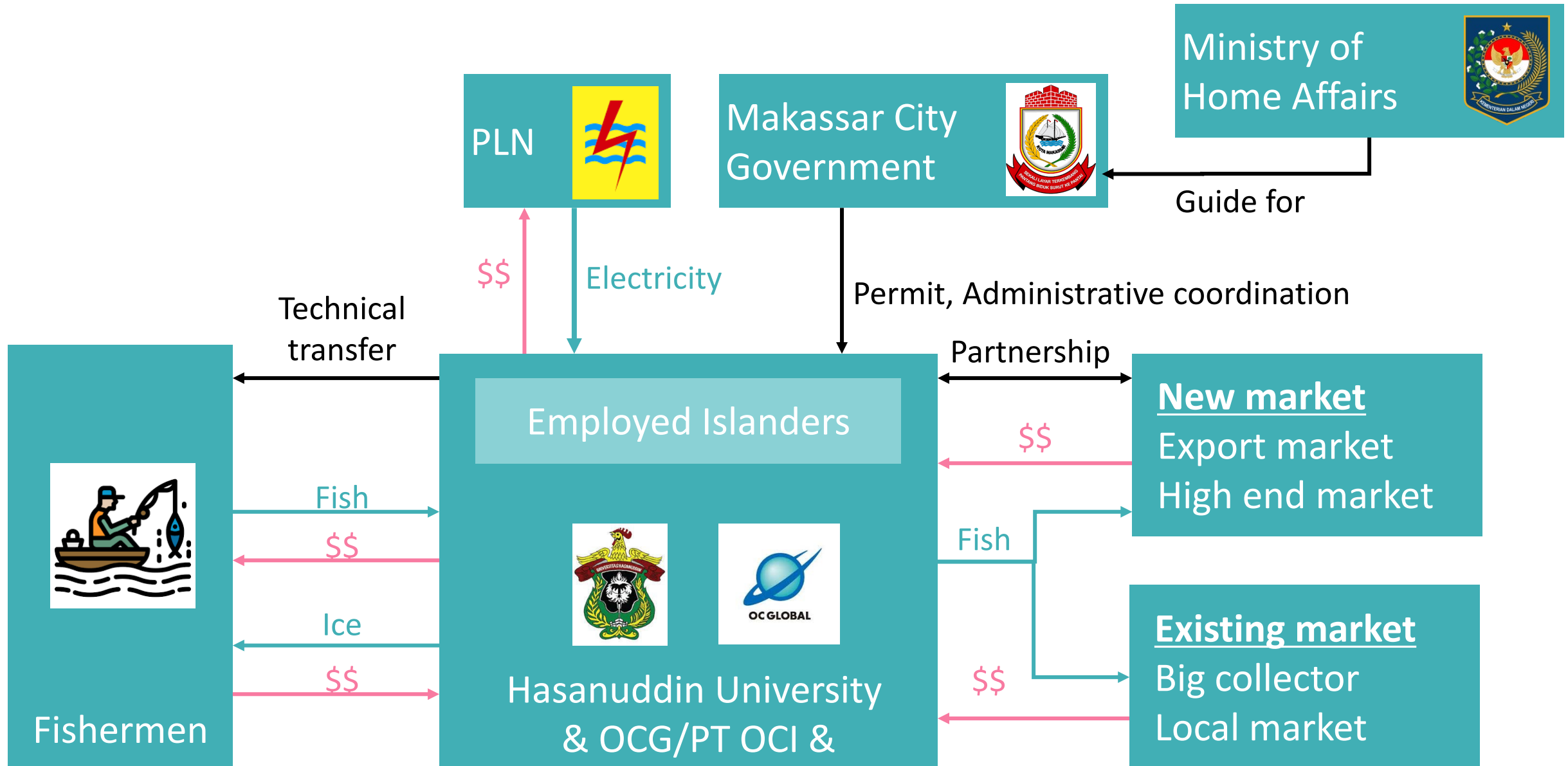
Benefits to local community

Improve Access to Ice → **Improve Fish Quality**

↓

Boost Local Economy ← **Increase Income for Fishers**

↓

Improve Quality of Life

Business expansion
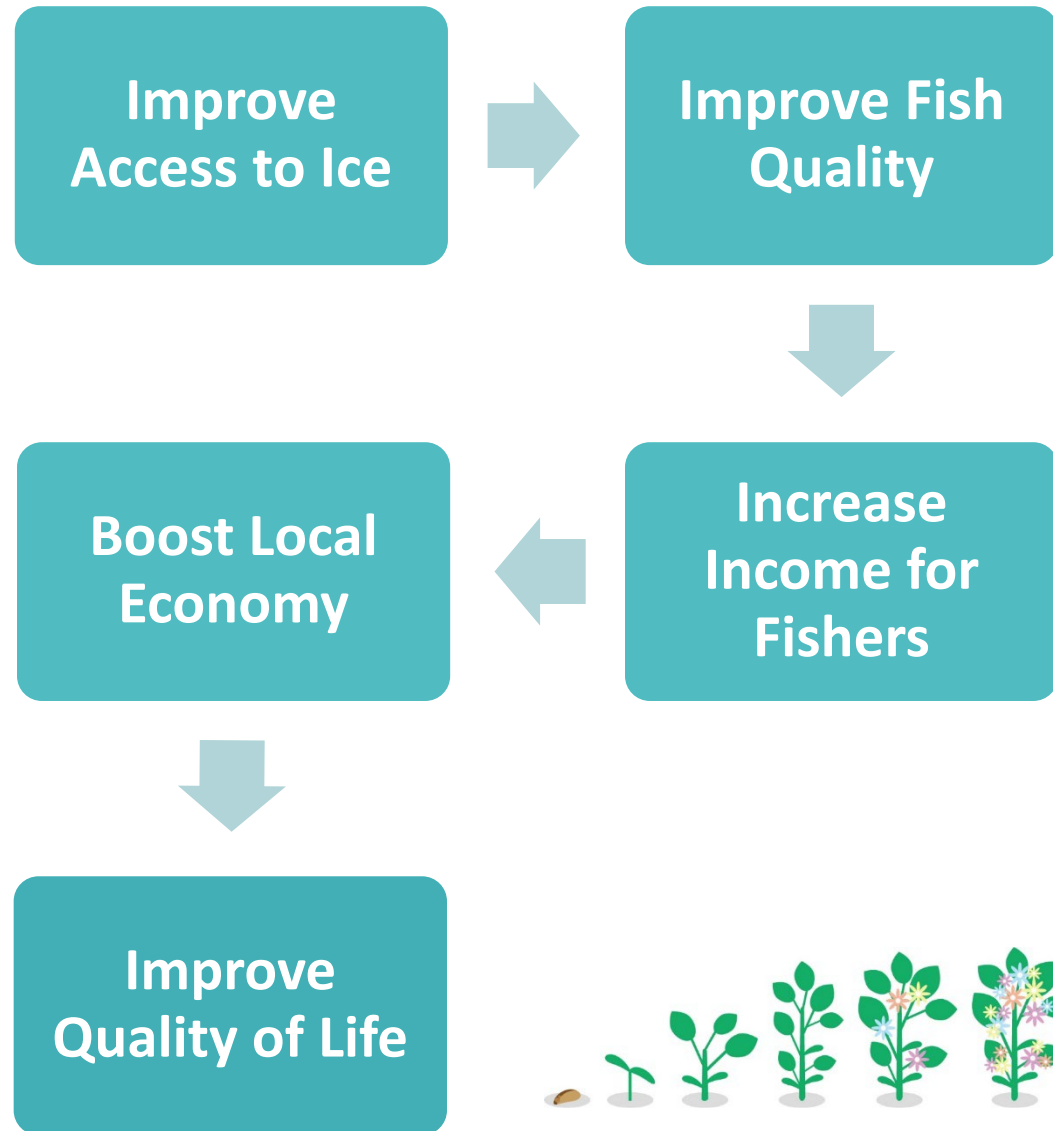
	•Launch pilot project	•Expand region to **South Sulawesi Province**	•Expand region to **Eastern Indonesia** •Expansion of business scale	•Go for IPO
	Phase 1	**Phase 2**	**Phase 3**	**Phase 4**
	2024 -	2026 -	2028 -	2035 -
# of Locations	1	5-10	15-20	50-60
Business entity	PT OCI	SPC		IPO
Fund	OCG+1	JICA/JOIN/ESG Fund		

Toward smart islands

Diversification of businesses

Start the business

Pilot project

Feasibility Study

Remote medical care

Disaster prevention by microgrid

Fintech

Clean transportation, sightseeing

Smart waste management

Education for fishery

Clean energy
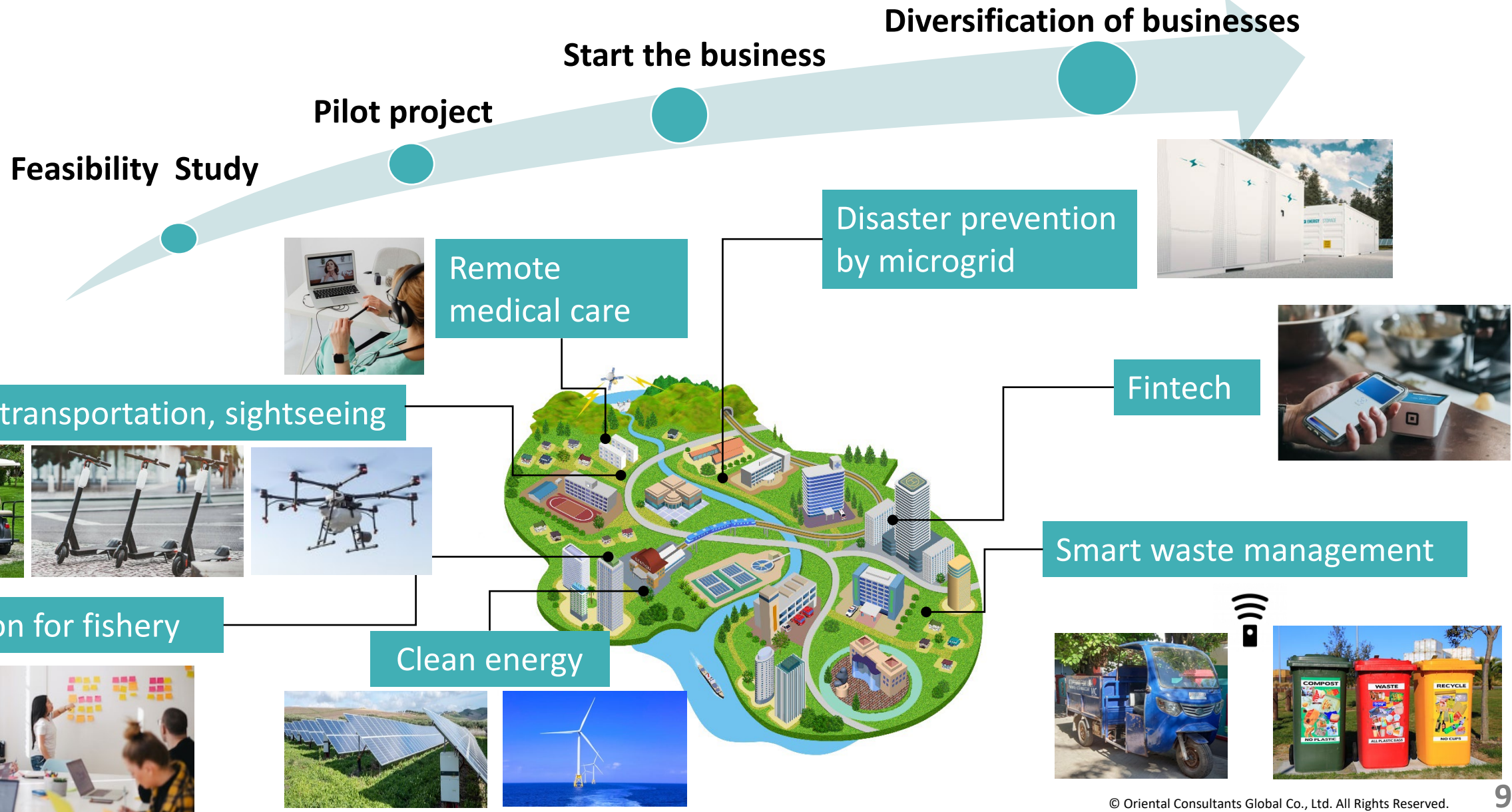
Terima kasih
Thank you

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