



Korea - Ocean Economy Initiative

22th July 2024



Ministry of Oceans
and Fisheries

Value of Oceans

Worldwide

75% of oxygen supply

3 billion living in coastal areas

80% of all life

5% of global GDP, USD 3 trillion/year

Republic of Korea

Maritime jurisdiction: **4.4 x landmass, 3,382 islands**

14 million(27.2%) living in coastal areas

USD 134 billion in total revenue, **1.32M workers**

4th largest vessel owner, **12th** largest fishery producer

Oceans in Crisis

Worldwide

Max. 3.7°C rise in sea surface temp. by 2100

1m rise in sea level by 2100

50% growth in CO₂ emissions since 1990

Max. 24% fall in catch potential

Republic of Korea

Sea surface temp. rise: **2.4 x global average**

2012-2020 coastal disaster losses: **USD 1.1 billion**

Fishery resources and marine ecosystem turning sub-tropical

48.6% decline in coastal and inshore fishery production (vs. 1986)

SDGs Goals



A Bold First Step towards Overcoming Immediate Crises and Enabling Sustainable Development



Ocean:
Shared By the
Global Community



High Tech:
Means to
Overcome the Crisis



Talents:
Leaders of the
Future



A Vision of Joint Growth for ROK and Partners through Oceans

→ **Korea - Ocean Economy Initiative** ←

K-Ocean Economy Initiative

Vision

**ROK – A Leader in Overcoming the Climate Crisis
and Achieving Sustainable Joint Growth**

Key Strategies

STRATEGY

1

**Climate Crisis
Responses**

STRATEGY

2

**Sustainable
Fisheries**

STRATEGY

3

**Marine
Environment
Conservation**

STRATEGY

4

**Nurturing
Talents and
Capacity building**

Climate crisis response

GOAL

Carbon Negative by 2050

GHG Reduction

- ✓ Replacing 60% of aged vessels with eco-friendly vessels (container carriers serving US/European routes by 2030)
- ✓ Developing ammonia/hydrogen-powered vessels (by 2031)
Supplying LNG-powered fishing vessels (from 2025)

Blue Carbon Restoration and Expansion

- ✓ Absorbing 1.066 Mt of carbon (by 2030) with blue carbon from tidal flats, etc.
- ✓ Endeavoring to recognize blue carbon from non-vegetation tidal flats ('23) and marine forests (from '24)

Disaster Response

- ✓ Developing K-Ocean Watch System (by 2030)
- ✓ Building Disaster-resilient ports (by 2032)

Cooperation

- OTEC generator support ('23-'26, Marshall Islands)
- Policy improvement support for GHG reduction in shipping (Latin America, '24-'28)

Cooperation

- Capacity building on blue carbon management and restoration (IUCN collaboration, 2024-2028)

Cooperation

- Advancement of Ocean Acidification Observation System (Samoa, 2022-2026)

Sustainable fisheries

GOAL

Transition to Tech-Driven Eco-Friendly Fisheries

Sustainable Fisheries

- ✓ Switching to TAC-based, output-focused fisheries management (from 2027)
- ✓ Expanding marine forests to recover resources (540 km², by 2030)

Eco-Friendly Aquaculture

- ✓ Creating smart aquaculture clusters (6 clusters by 2027)
- ✓ Adopting aquafarm environmental assessment (from 2025)

Fishing Village Infrastructure Reinforcement

- ✓ Enhancing infrastructure in 300 fishing villages (by 2030)
- ✓ Ensuring ferry stops cover all islands (by 2027)

Cooperation

- PSMA training (FAO collaboration, 2024-2026)
 - Joint efforts to fight IUU fishing, e.g. CAPFISH Workshop (WMU collaboration, 2024-2028)
- * Capacity building project to progress the implementation of international instruments to combat IUU fishing

Cooperation

- Makogai Fisheries and Aquaculture Institute (Fiji, 2024-2028)
- White clam farming technology (Vietnam, 2022-2026)

Cooperation

- Specialized projects for fishing villages (Tuvalu, Senegal, Kiribati)

Marine environment conservation

GOAL

Zero Waste in ROK Jurisdictional Waters by 2050

Marine Litter

- ✓ Reducing marine plastic litter production by 60%
- ✓ Practicing full LCM of marine plastic litter, e.g. fishing gear deposits (from 2024)

Marine Space Plan(MSP)

- ✓ Adopting (from 2022) and gradually advancing MSP throughout territorial sea
- ✓ Adopting sea area utilization assessment for well-organized maritime development (from 2024)

Marine Protect Area (MPA)

- ✓ Adding more tidal flats to UNESCO World Heritage List (by 2027)
- ✓ Creating national marine eco parks (6 areas)

Cooperation

- Marine litter management system for Pacific States (IUCN collaboration, 2024-2028)
- Marine plastics reduction project in East Asia (Philippines, Timor Leste, 2023-2028)

Cooperation

- Cooperation project on sharing MSP experience and analytics (from 2024)

Cooperation

- Sharing MPA best practices, cooperation for training/education (IUCN collaboration, 2021-2025)
- Cooperation project on revitalizing marine eco-tourism (from 2024)

Nurturing talents and capacity building

GOAL

Korea-Pacific Islands Ocean and Fisheries Talent Network by 2030

Fostering Leaders

- ✓ Developing future leaders of global oceans and fisheries cooperation

Training Marine Engineers

- ✓ Bolstering smart technology education to train global marine engineers (from 2024)

International Observers

- ✓ Training global observers to eradicate IUU fishing

Cooperation

- Highest level specialized policy training (oceans and fisheries doctorate course, from 2024)

Cooperation

- Female marine engineers training (Pacific Islands, IMO collaboration, 2023-2026)
- Invitational training of marine engineers (w/Korean training ship, 2024-2026)

Cooperation

- Invitational training of international observers (e.g. catch inspection, international instruments)

K-Ocean Economy Alliance



Signing MOUs

International
Organizations



Cooperative
Projects

Utilizing Networks

Federated States of
Micronesia

Ocean Science
Joint Research
Center

* '10 in the Caribbean, etc.
by 2030

Korea-Fiji



Ocean and Fisheries
Cooperation
Center

* 'MOU signed in May 2023





K-Ocean Economy Alliance and World Expo 2030 Busan

Contributing to **2050 Strategy for
the Blue Pacific Continent
and Sustainable Development**