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

K-Ocean Economy Initiative

**Vision**

**Key Strategies**

1. Climate Crisis Responses
2. Sustainable Fisheries
3. Marine Environment Conservation
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)
- Capacity building on blue carbon management and restoration (IUCN collaboration, 2024-2028)
- Advancement of Ocean Acidification Observation System (Samoa, 2022-2026)
## Sustainable Fisheries

### GOAL
**Transition to Tech-Driven Eco-Friendly Fisheries**

<table>
<thead>
<tr>
<th>Sustainable Fisheries</th>
<th>Eco-Friendly Aquaculture</th>
<th>Fishing Village Infrastructure Reinforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Switching to TAC-based, output-focused fisheries management (from 2027)</td>
<td>✓ Creating smart aquaculture clusters (6 clusters by 2027)</td>
<td>✓ Enhancing infrastructure in 300 fishing villages (by 2030)</td>
</tr>
<tr>
<td>✓ Expanding marine forests to recover resources (540 km², by 2030)</td>
<td>✓ Adopting aquafarm environmental assessment (from 2025)</td>
<td>✓ Ensuring ferry stops cover all islands (by 2027)</td>
</tr>
</tbody>
</table>

### Cooperation

- **Sustainable Fisheries**
  - PSMA training (FAO collaboration, 2024-2026)
  - Joint efforts to fight IUU fishing, e.g. CAPFISH Workshop (WMU collaboration, 2024-2028)

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

- **Fishing Village Infrastructure Reinforcement**
  - Specialized projects for fishing villages (Tuvalu, Senegal, Kiribati)

* Capacity building project to progress the implementation of international instruments to combat IUU fishing.
Marine environment conservation

**GOAL**  Zero Waste in ROK Jurisdictional Waters by 2050

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**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)

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

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

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**Cooperation**
- Sharing MPA best practices, cooperation for training/education (IUCN collaboration, 2021-2025)
- Cooperation project on revitalizing marine eco-tourism (from 2024)
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
Contributing to 2050 Strategy for the Blue Pacific Continent and Sustainable Development